OLYMPUS®

REPAIR MANUAL

OM 2000
SPOT METERING

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RMC-903

OLYMPUS OPTICAL CO., LTD.

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A. PRODUCT OUTLINE

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House code	**MDK**
Product name	OM-2000 (uniform name throughout the world)
Date of sales	July, 1997. (Japan) August, 1997. (Overseas)
Type	35 mm focal-plane shutter single-lens reflex camera
Picture size	24X36mm
Film	35 mm film.
Lens mount	OLYMPUS OM mount
Finder	Eye-level single lens reflex using fixed prism (condenser lens-less type)
Focusing screen	split micro-prism (fixed and not interchangeable)
Standard diopter	-1± 0.4diop.
Field of view ratio	Approx. 93% both vertically and horizontally
Magnification	Approx. 0.84X (50 mm, ∞)
Finder display	LED display; + LED (Red), O LED (Green),- LED (Red), and Spot LED (Orange) ✚ Red LED: lighting when exposure is over by one step or more. ◯ Green LED: lighting when exposure is proper. ▭ Red LED: lighting when exposure is under by one step or more. ○ Orange LED: lighting at spot mode.
Mirror	Quick-return full reflection mirror (without mirror-up mechanism).
Prism	aluminum-spatter.
Exposure control	
Photometry system	SPD allows to select TTL-open centralized average photometry or spot photometry
Photometry range	EV 2 to 19 (ISO 100: f2, one sec. to f16, 1/2000 sec.)
Exposure control system	Fix coincidence system by lighting green LED.
Start of displaying	lit when first release is ON (gone off when it is OFF).
Film sensitivity	Manual setting by 1/3 steps with the setting range from ISO 25 to 3200.

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Shutter

Type	Mechanical focal plane shutter, vertical type.
Shutter speed	B, 1 - 1/2000 sec.(impossible to use middle speed). BULB, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (Sec)
Flash synchro-speed	1/125 sec or slow.
Release system	Mechanical type, release-lock available, Possible to use cable release.
Release button	Two step system : First release ON activates Photometry. Second release ON permits shooting.
Self-timer	Approx. ten sec. by mechanical system (impossible to release halfway). It is possible to adjust operation time according to the position of the self-timer lever.

Film feed

Film load	Simple loading with slit spool.
Film wind	Winding by the winding lever system with the angle of spare 30 degrees and angle of winding 135 degrees (impossible to wind bit by bit). Release is locked when the winding lever is housed.
Film rewind	Rewinding by setting the rewind button at the bottom of the camera and rotating the rewind knob. The rewind button returns automatically by winding.
Film counter	Mechanical sequential counting. Returned when the rear cover is open. Display divisions: S ••1••4•6•8•10•12•14•16•18•20•22•24•26•28•30•32•34•36• S, 12, 20, 24, and 36 are displayed by red characters and others are displayed by white ones.
Multi exposure	Operated by multi exposure lever

Others

Rear cover	Opened by pulling up the rewind knob.
Flash contact	Only X contact with accessory shoe is available (synchro terminal and TTL socket are not on board).
Tripod screw	U 1/4 (JIS B 7103)
Power supplies	Two alkaline batteries or two SR44 silver oxide batteries.
Battery check	Finder LED lights when batteries are alive and does not light when batteries are dead.
Quality of the material	Aluminum die casting alloy.
Size	139.3 (W) x 88.4 (H) x 59.0 (D)mm
Weight	Approx. 433g.

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Shutter release

Stroke is 0.3 to 0.8 mm until LED lights on.

Stroke is 0.3 to 0.8 mm from LED on to Shutter fire.

Space between shutter fire and Release button's end should be 0.2 mm or more.

Curtain speed

5.8 to 6.1 ms at 1/1000

Shutter speed

Standard unit: ms

Speeds	Standard values	Specifications
1/1	1000	732～1366
1/2	500	366～683
1/4	250	183～342
1/8	125	91.5～171
1/15	62.5	45.8～85.4
1/30	31.2	22.9～42.7
1/60	15.6	11.4～21.4
1/125	7.81	7.81～11.05
1/250	3.91	2.58～5.92
1/500	1.95	1.29～2.96
1/1000	0.977	0.58～1.64
1/2000	0.488	0.29～0.82

Exposes unevenly

Each difference between the maximum value and minimum value of the upper, central, and lower parts in the screen should be within 0.5EV.

Exposure erratic

Each difference between series of five maximum values and minimum values of the central part in the screen should be within 0.5EV.

Difference between adjacent speeds

Difference in exposure between adjacent speeds should be 0.3EV or more.

B.C voltage

LED in the finder should light when the battery voltage is 2.6 V or more.

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Exposure specification

: Exposure over (+1.0EV or more)

: Exposure over (+0.25EV to +1.0EV)

: Proper exposure (+/-0.25EV)

: Exposure under (-0.25 to -1.0EV)

: Exposure under (-1.0EV or more)

Specification

LV	F. No	SS	Indication differences
LV9	F5.6	1/15	±0.5EV
LV11	F5.6	1/60	±0.5EV
LV13	F5.6	1/250	±0.5EV
LV15	F5.6	1/1000	±0.5EV

※ISO100

※Both average and Spot

※Measurement is performed near the center of lighting width of green LED.

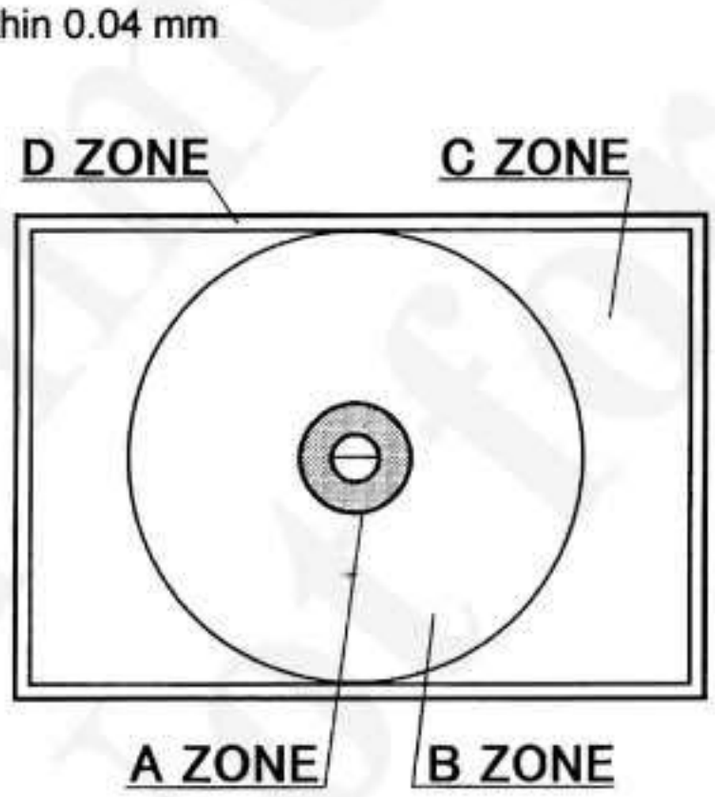
Flange back

Length between mount surface and inside rail surface.

Specification 46.00±0.03mm

Parallel Within 0.04 mm

Finder-dirt specification



Number of dust: The number of visible dust should be 12 or less.

Size of a dust : The size should be estimated Φ 0.3mm or less.

Interval between dust : They should be separated 1 mm or more.

Filform (nap) : The size should be within
Φ 0.1 mm and 2 mm in length.

A zone : Within two (in micro-prism).

B zone : Within three (central of mat surface)

C zone : Within four (except A, B, and D zone)

D zone : Within five (in the frame of 3mm in width from the outside of the screen)

Current consumption

One finder LED lights: 5mA. Two finder LEDs light: 10mA.

Three finder LEDs light: 15mA. Finder LED is off: 0 uA

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Restrictions. (Restrictions for the OM system)

1. **Interchangeable lens groups**

※Because the quick-return mirror is smaller than that of former OM system, the use of a telephoto lens of f = 600mm or more causes vignetting.

※Because the screen is not interchangeable, the lens which requires the screen to be exchanged does not permit proper shooting. When using the following lenses, the sprit-prism or its surroundings on the screen may become dark

- ZUIKO SHIFT 24mm F3.5 / 35mm F2.8
- ZUIKO REFREX 500mm F8
- ZUIKO TELEPHOTO 400mm F6.3 / 600mm F6.5 / 1000mm F11.
- ZUIKO MACRO 20mm F2 / 38mm F2.8 / 38mm F3.5 / 80mm F4 / 135mm F4.5.

When using the shift lens, the revision can not be checked because divisions do not appear in the screen.

2. **Flash photo groups**

TTL auto flash shooting is not available.
Only normal auto and manual flashes are available.
And it is impossible to use multi flash and remote flash because a synchro terminal is not on board.

3. **Motor drive groups**

Can not use at all.

4. **Photomicro groups**

Being impossible to select the focusing screen required for photomicrography results in a coase-grained screen and causes the lens to have difficulty in being focused. Except this situation, it is possible to use these groups.

5. **Macrophoto groups**

Being impossible to select the focusing screen necessary for Macrophotography results in a coase-grained screen causes the lens to have difficulty in being focused. Except this situation, it is possible to use these groups.
Use of the close and causes the lens to have difficulty in being focused up lens, auto extension tube 7, 14 and 25 etc is recommende.

6. **Photo technical groups**

※It is possible to use only SR-2 cable release, double cable release, and OM mount astroscope adapter.

※When using the OM mount astroscope adapter, being impossible to select the focusing screen required for astrophotography results in a coase-grained screen and casues the lens to have difficulty in being focused.

7. **Finder groups**

※It is possible to use only OM system's eye coupler, varimagni finder, and dioptric collection lens2 (with eyecup2) +2, +1, -1, -2, -3, -4, -5. installed in the eyepiece frame of the camera.

※The difference in finder diopter official value between the OM-2000 and former products is -0.45D. When using the dioptric collection lens2(with lens for diopter adjustment), its diopter gets out of position by -0.45D compared to official diopter.

8. **Case groups**

Can not use at all.

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B.DISASSEMBLY AND ASSEMBLY PROCEDURE

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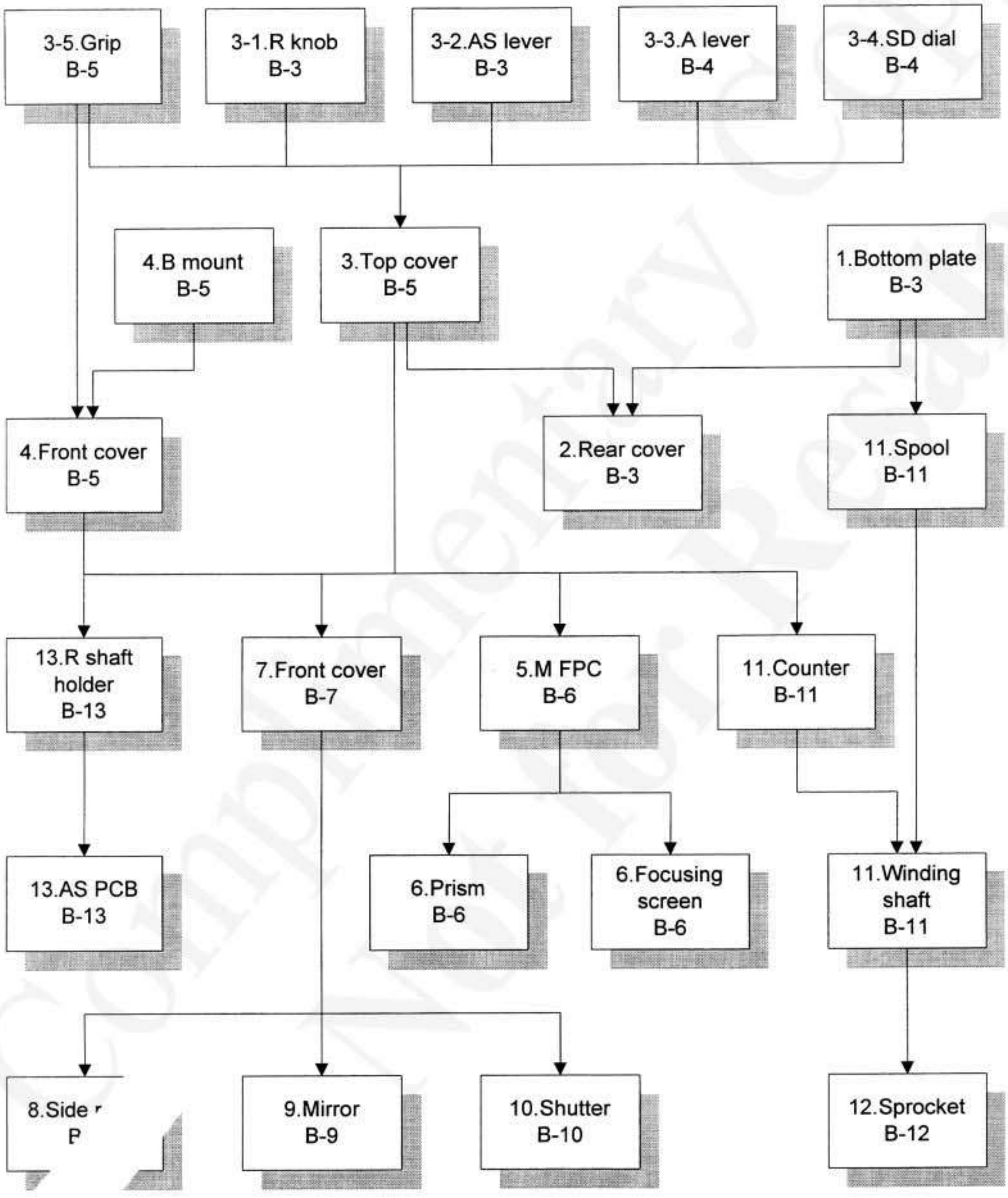
[1] Flowchart of disassembly and assembly



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[2] Disassembly and assembly procedure

1. Removal and installation of the bottom plate

〔Disassembly procedure〕

1) Remove four screws and take off the bottom plate.

〔Assembly procedure〕

1) Install the bottom plate and fasten it with four screws.

2. Removal and installation of the rear cover

〔Disassembly procedure〕

1) Pull out the shaft and remove the rear cover. Two side collars to be removed.

〔Assembly procedure〕

1) Fasten the rear cover with the shaft and the two side collars.

3. Removal and installation of the top cover

For removal of the top cover, it is necessary to take off the 3-1 R shaft, 3-2 AS lever, 3-3 A lever, 3-4 SD dial, and 3-5 grip.

3-1. Removal and installation of the R knob

〔Disassembly procedure〕

1) Hold the R shaft and turn the R knob ① counterclockwise. (Fig-1)

〔Assembly procedure〕

1) Apply grease (H-26) to the R shaft. (Fig-2)

2) While holding the R shaft, turn the R knob ① clockwise and install it. (Fig-1)

3-2. Removal and installation of the AS lever

〔Disassembly procedure〕

1) Remove a screw ② and take off the AS lever ③. (Fig-1)

〔Assembly procedure〕

1) Install the AS lever ③ and fasten it with the screw ②. (Fig-1)

Fig-1

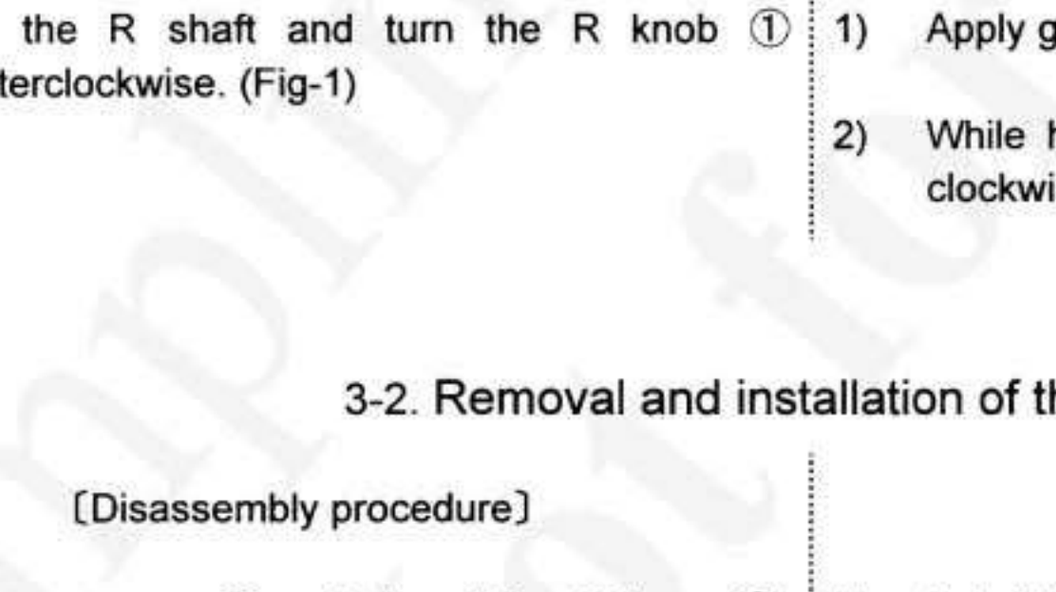
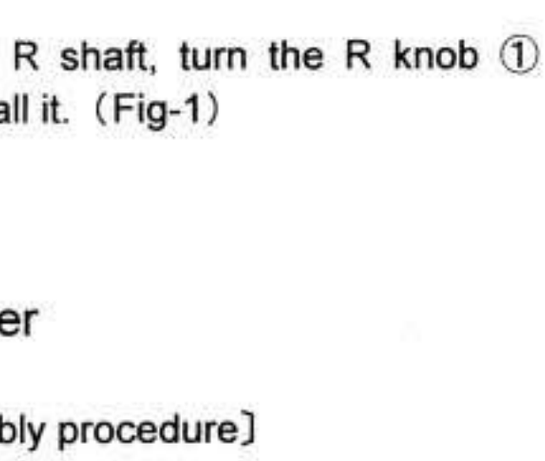


Fig-2



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3-3. Removal and installation of the A lever

〔Disassembly procedure〕

1) Remove a screw ① and take off the AL cover ② (Fig-1)

2) Slide the AL washer ③ and remove it. (Fig-2)

3) Remove the AL spring ④, A lever ⑤,RL plate ⑥, and AL cam ⑦. (Fig-1.)

〔Assembly procedure〕

1) Install the AL cam ⑦ with its chamfered face downward. (Fig-1)

2) Apply grease(H-26) to the upper part of the AL cam ⑦. (Fig-1)

3) Install the RL plate ⑥, AL lever ⑤, and AL spring ④. (Fig-1)

4) Install the AL washer ③ by sliding it, and fasten the AL cover ② with the screw ①. (Fig-1.2)

3-4. Removal and installation of the SD dial

〔Disassembly procedure〕

1) Remove the SD screw ⑧ and take off the SD plate ⑨, ISO plate ⑩, ISO spring ⑪, SD dial ⑫, ISO collar ⑬, and ISO stopper ⑭. (Fig-3)

〔Assembly procedure〕

1) Set the ISO contact to ISO 100. (Fig-4)

2) Set the shutter dial shaft to BULB. (Fig-4)

3) Install the ISO stopper ⑭, ISO collar ⑬, SD dial ⑫, ISO spring ⑪, ISO plate ⑩, and SD plate ⑨, and fasten them with the SD screw ⑧. (Fig-3)

Fig-1

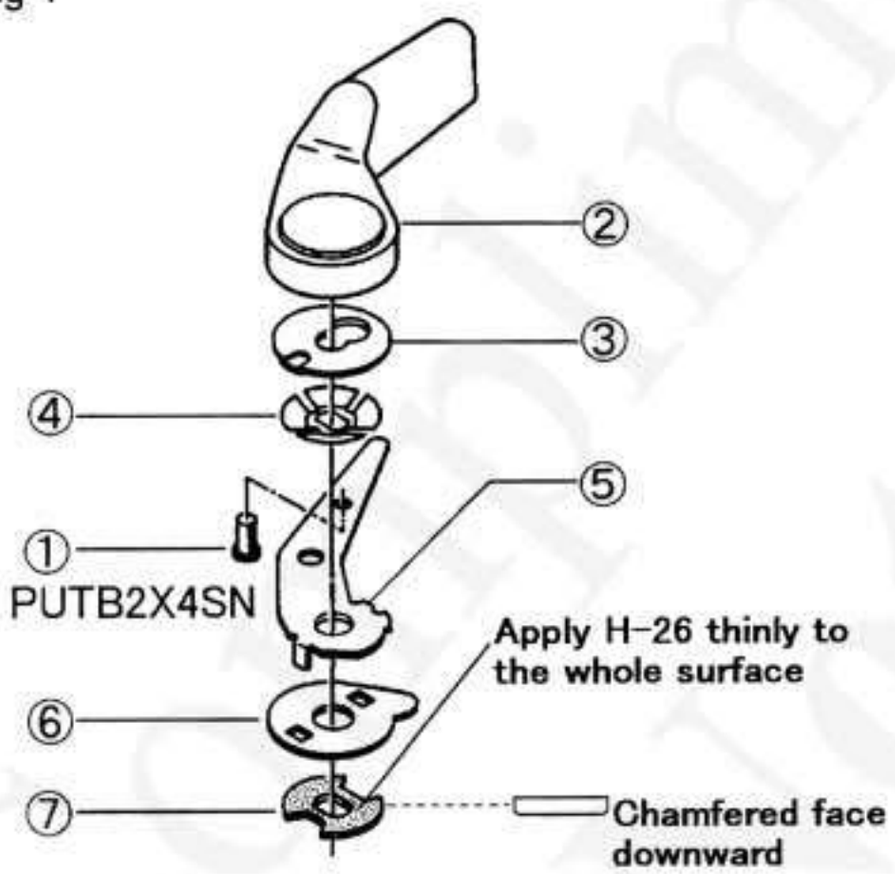


Fig-2

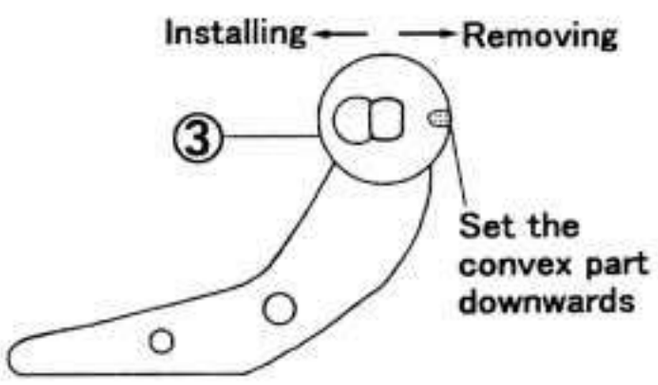


Fig-3

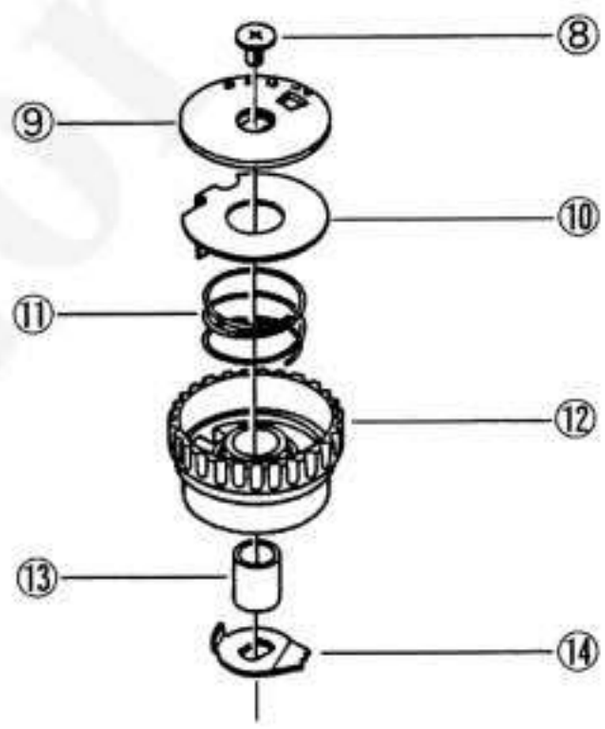
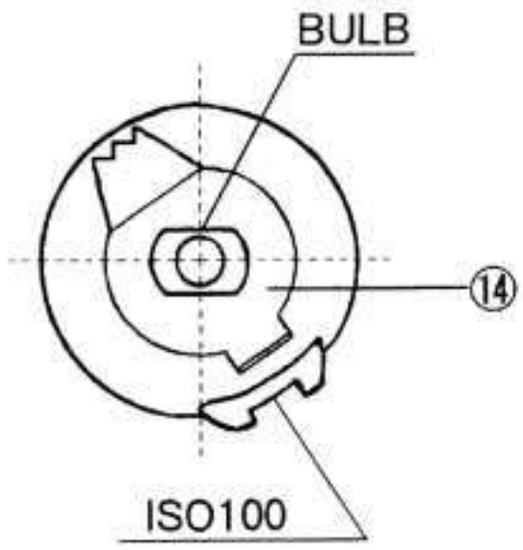


Fig-4



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3-5. Removal and installation of the grip

[Disassembly procedure]

1) Peel off the name plate ① and remove two screws ②. (Fig-1)

2) Peel off the ST cover ③, remove the ST screw ④ and take off the ST lever ⑤. (Fig-1)

3) Peel off the grips L ⑧ and R ⑨ attached with G tapes L ⑥ and R ⑦. (Fig-2)

4) Remove four screws ⑩ and take off the top cover ⑪. (Fig-3)

5) The release pin ⑫ is to be removed. (Fig-3)

[Assembly procedure]

1) Apply grease (H-26) to the release pin ⑫, install it on the top cover and fasten the top cover with the four screws ⑩. (Fig-3)

2) Fix the grips L ⑧ and R ⑨ by attaching the G tapes L ⑥ and R ⑦. (Fig-2)

3) Install the ST lever ⑤ and fasten it with the ST screw ④. Glue the ST cover ③ with SUPER X (BLACK). (Fig-1)

4) Install the two screws ② and glue the name plate ① with SUPER X (BLACK). (Fig-1)

4. Removal and installation of the front cover

[Disassembly procedure]

1) Remove three screws ⑬ and take off the B mount ⑭. (Fig-4)

2) Remove four screws ⑮ and take off the front cover ⑯. (Fig-4)

[Assembly procedure]

1) Install the ST lever base ⑰ of the front cover upwards and fasten it with the four screws ⑮. (Fig-4)

2) Install the B mount ⑭ and fasten it with the three screws ⑬. (Fig-4)

Fig-1

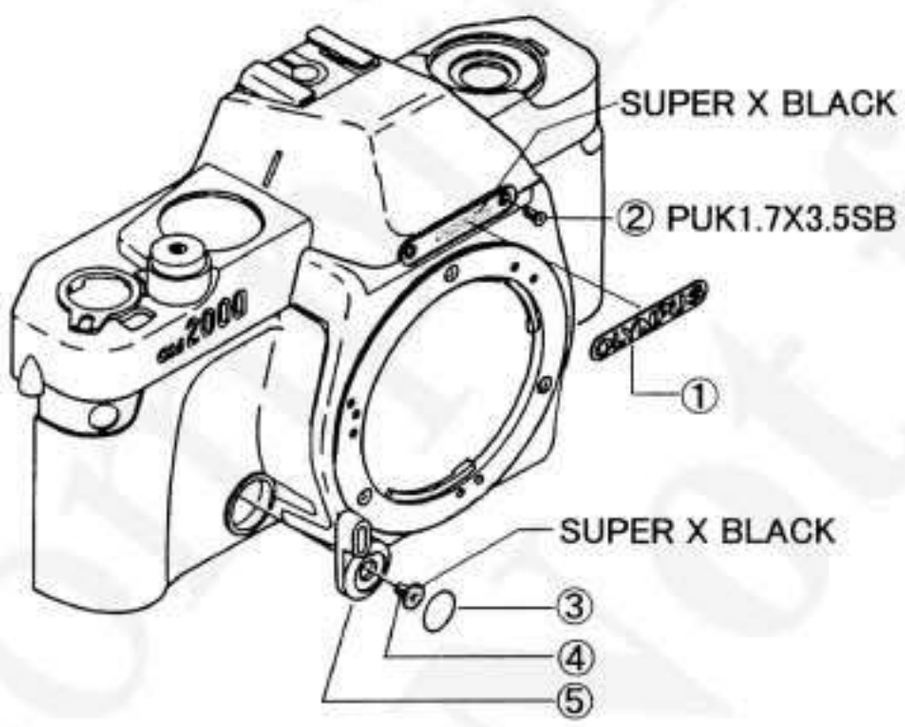


Fig-2

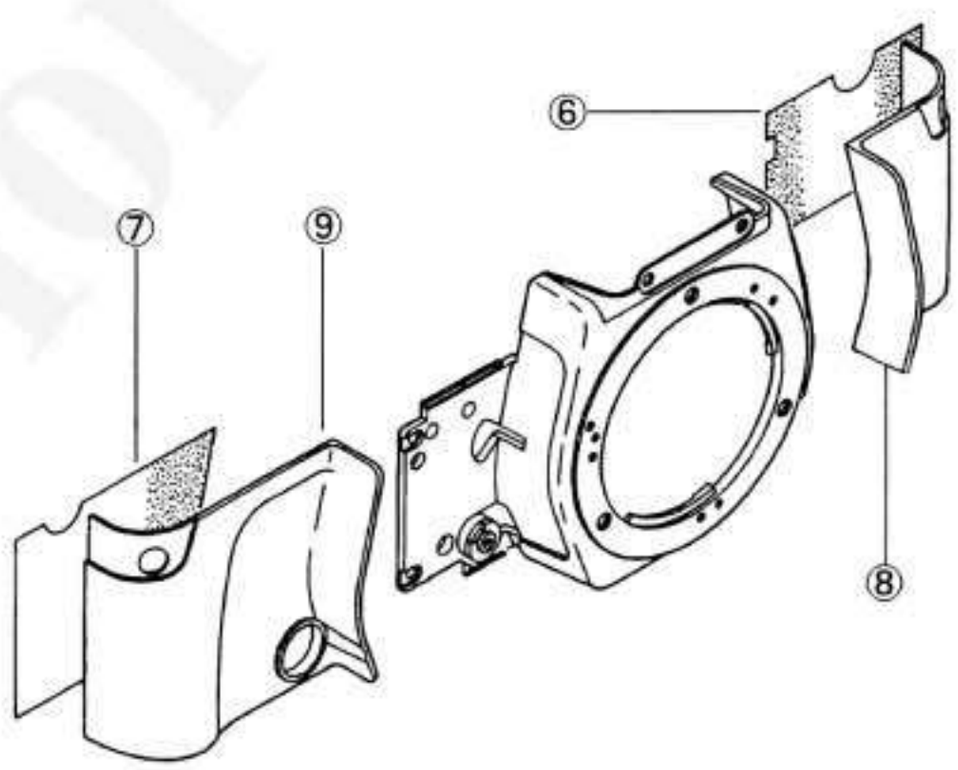


Fig-3

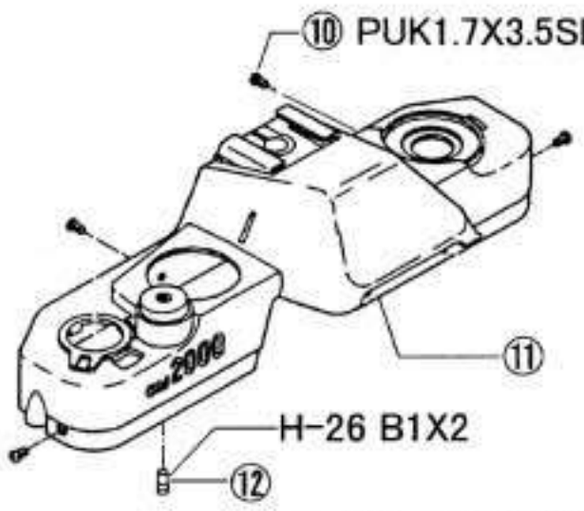
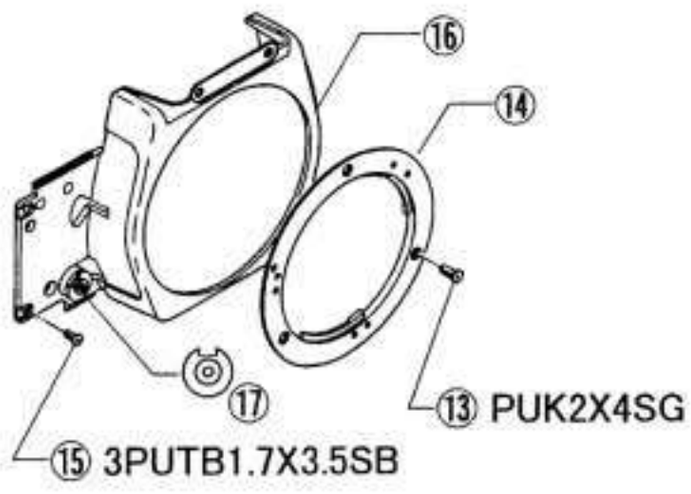


Fig-4



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5. Removal and installation of the M FPC

〔Disassembly procedure〕

1) Unsolder the FPC ① on the SD unit, and LED FPC ②, then remove ten lead wires ③. (Fig-1)

2) Remove the M FPC attached to the prism with double-coated tape.

〔Assembly procedure〕

1) Attach the M FPC to the prism with double-coated tape.

2) Solder ten lead wires ③, then solder the LED FPC ② and FPC ① on the SD unit. (Fig-1)

6. Removal and installation of the focusing screen and prism

〔Disassembly procedure〕

1) Remove two screws ④ and take off the S frame ⑤. (Fig-2)

2) Peel off the F sponge ⑥, remove four screws ⑦ and then take off the prism and P base all together. (Fig-2)

3) Remove four screws ⑧ and take off the S holder ⑨ and focusing screen ⑩. (Fig-2)

4) Remove two screws ⑪ and take off the P holders L ⑫ and R ⑬. (Fig-3)

5) While peeling off the sealing, remove the prism. The F mask ⑭ and prism are to be removed at the same time. (Fig-3)

〔Assembly procedure〕

1) Install the F mask ⑭ on the P base ⑮, mount the prism, and fasten the P holders L ⑫ and R ⑬ with the screw ⑪. (Fig-3)

2) Mount the focusing screen ⑩ on the P base, install the S holder ⑨, and fasten it with the four screws ⑧. (Fig-2)

3) Apply the SUPER X (BLACK) to three sides (arrow-marked) except the eyepiece between the P base and prism for keeping away dust. (Fig-4)

4) Install the prism unit on the front casting and fasten it with the four screws ⑦. (Fig-2)

5) Install the S frame ⑤ and fasten it with the two screws(4), and then attach the F sponge ⑥.(Fig-2)

Fig-1

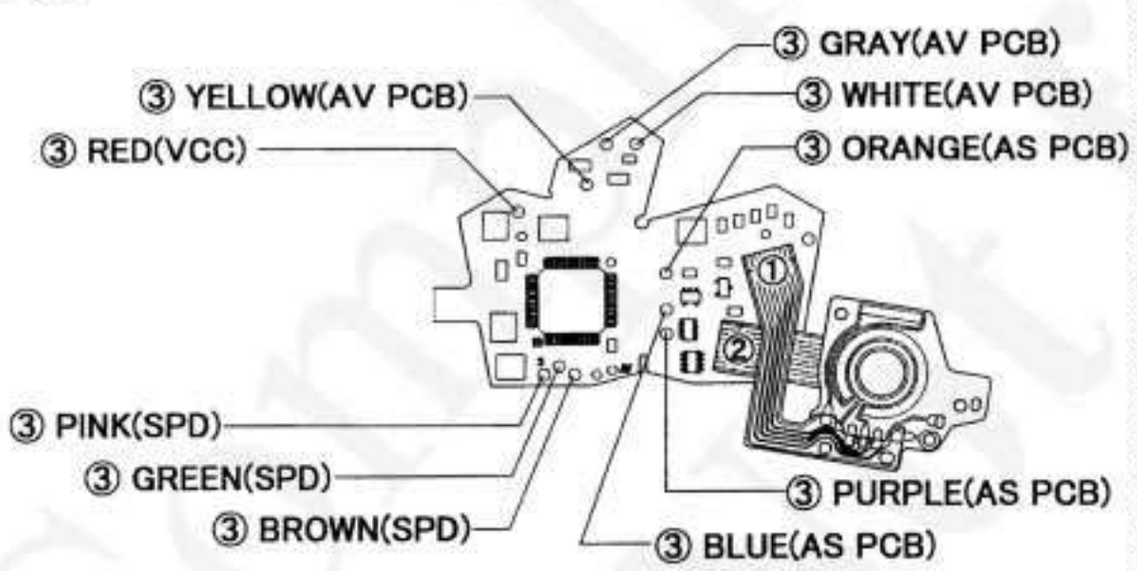


Fig-3

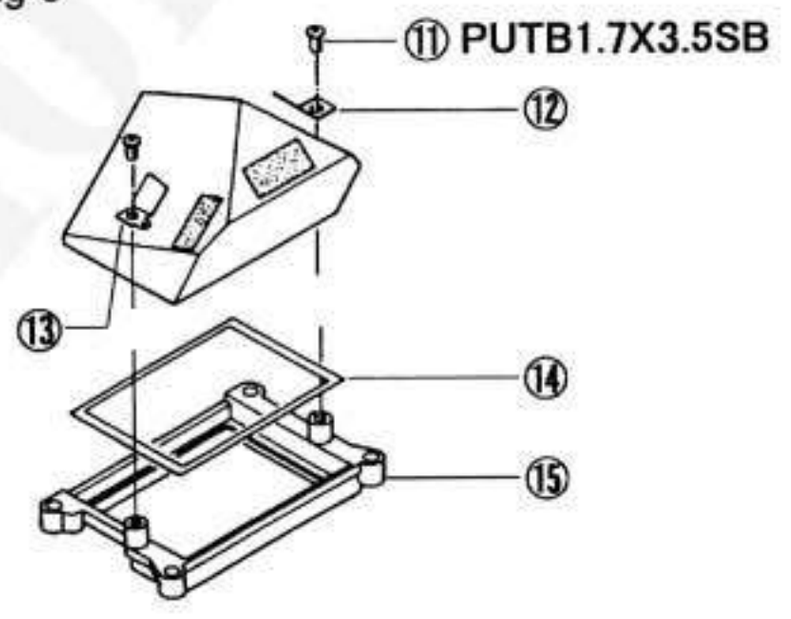


Fig-2

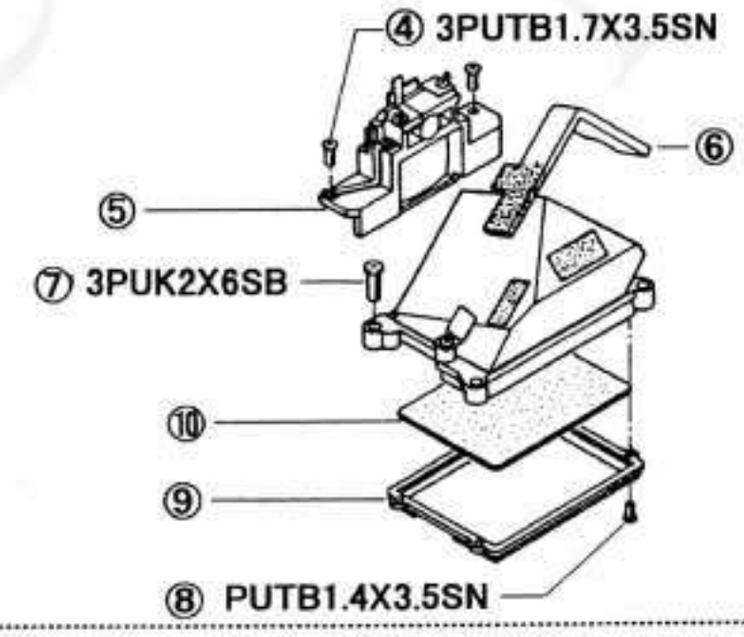
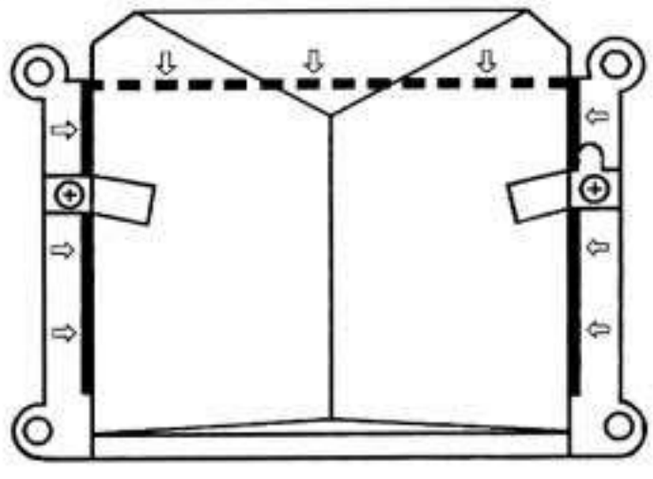


Fig-4



Eyepiece side

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7. Removal and installation of the front casting

〔Disassembly procedure〕

If the M FPC is not removed, remove four lead wires ② and the FPC ① on the SD unit. (Fig-1)

1) Remove three screws ③④ and take off the SD unit ⑤. (Fig-2)

2) Remove the blue lead wire ⑥ from the shoe contact. (Fig-3)

3) Peel off the S sponge ⑦, set the camera to wind-completion, and then remove four screws ⑧⑨,and take off the front casting. (Fig-4)

〔Assembly procedure〕

1) Set the shutter to ' BULB ' and wind-completion, discharge mirror and diaphragm mechanism.

2) While feeding the charge pin ⑪ of the SL base into the guide ⑩ of the set lever (Fig-5), insert the release portion ⑫ of the release plate into the guide ⑬ of the focus release lever on the side plate R (Fig-6), and then set the front casting to the body casting and fasten it with the four screws ⑧⑨. (Fig-4)

3) Install the shaft of the SD unit set to 'BULB', and then secure it with the three screws ③④. (Fig-2)

4) Attach the F sponge ⑦. (Fig-4)

If the M FPC is not removed, solder the FPC ① on the SD unit and four lead wires ②. (Fig-1)

Fig-1

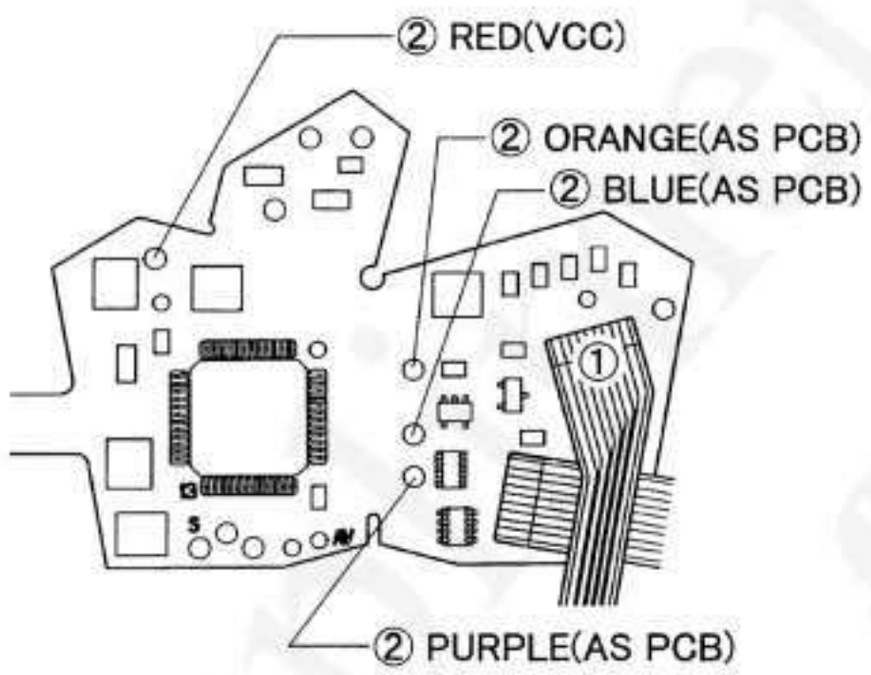


Fig-2

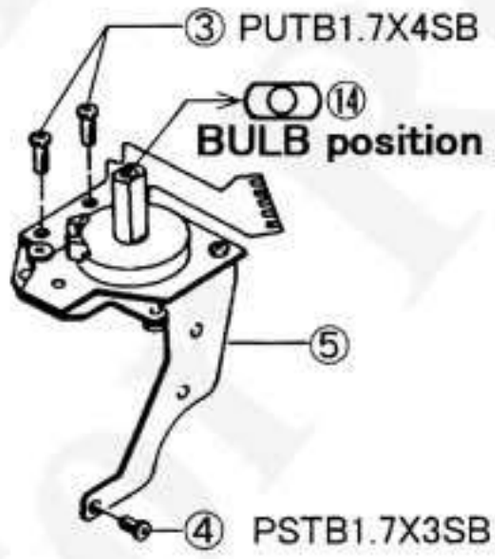


Fig-3

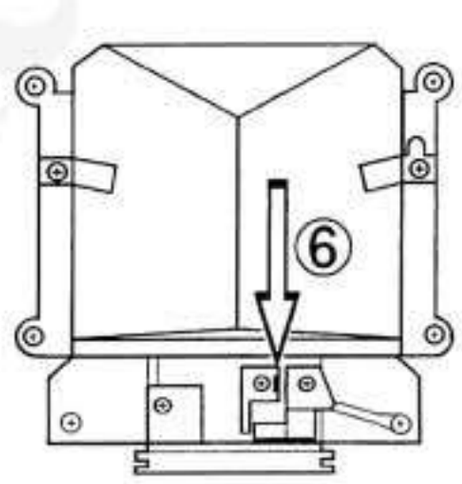


Fig-4

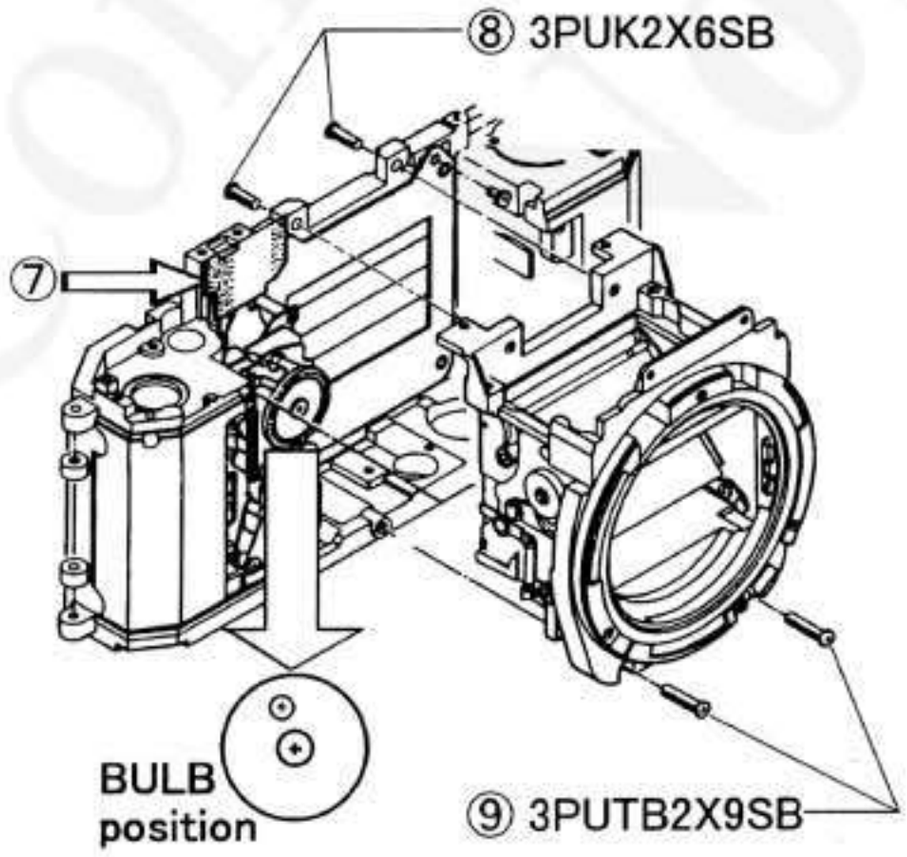


Fig-5

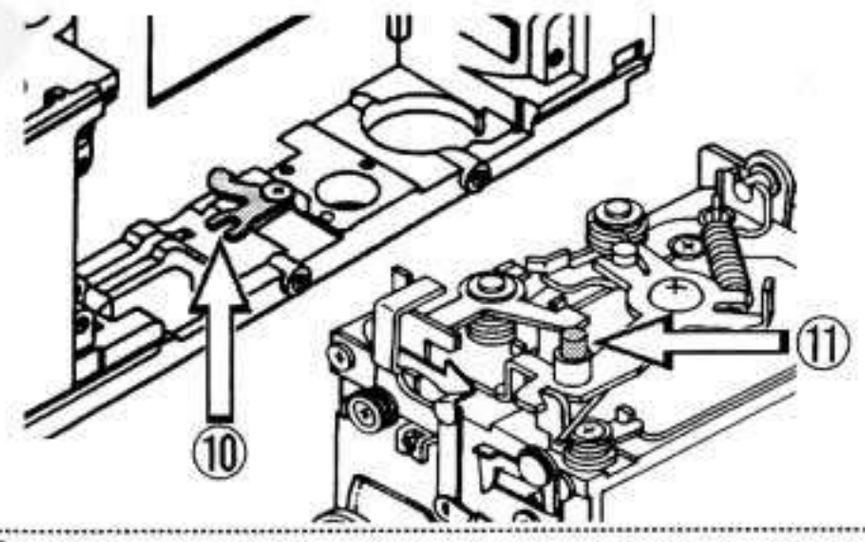
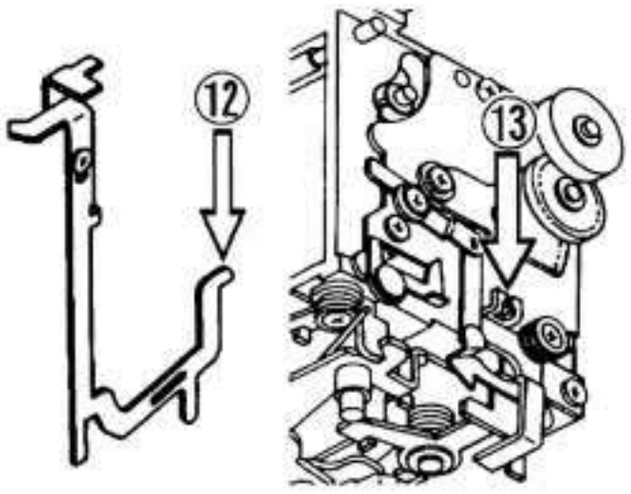


Fig-6



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8. Removal and installation of the side plate L, side plate R and SL base

〔Disassembly procedure〕

1) Remove three screws ① and take off the side plate L ②.
   The link plate ③ and link spring ④ are to be removed. (Fig-1)

2) Remove three screws ⑤ and take off the side plate R ⑥. (Fig-1)

3) Remove three screws ⑦ and take off the SL base ⑧. (Fig-1)

〔Assembly procedure〕

1) Apply grease (H-26) to the charge lever stopper ⑨ of the side plate R. (Fig-2)

2) Install the side plate R ⑥ and fasten it with the three screws ⑤. (Fig-1)

3) Hook the charge spring ⑩ of the SL base to the screw collar ⑪. (Fig-3)

4) Install the SL base ⑧ with the charge lever ⑫ set inside of the mirror lever ⑬(Fig-4 A), and the release lever ⑭ set inside of the diaphragm release lever ⑮ (Fig-4 B) and then fasten them with the three screws ⑦. (Fig-1)

5) Release the charge spring ⑩ from the screw collar ⑪, and stop it by the mirror lever ⑬. (Fig-4 A)

6) Install the link plate ③ and link spring ④ on the side plate L ②. (Fig-1)

7) Apply grease (H-26) to the sliding part ⑯ of the side plate L. (Fig-1)

8) Install the side plate L ② on the front casting and fasten it with the three screws ①. (Fig-1)

Fig-1

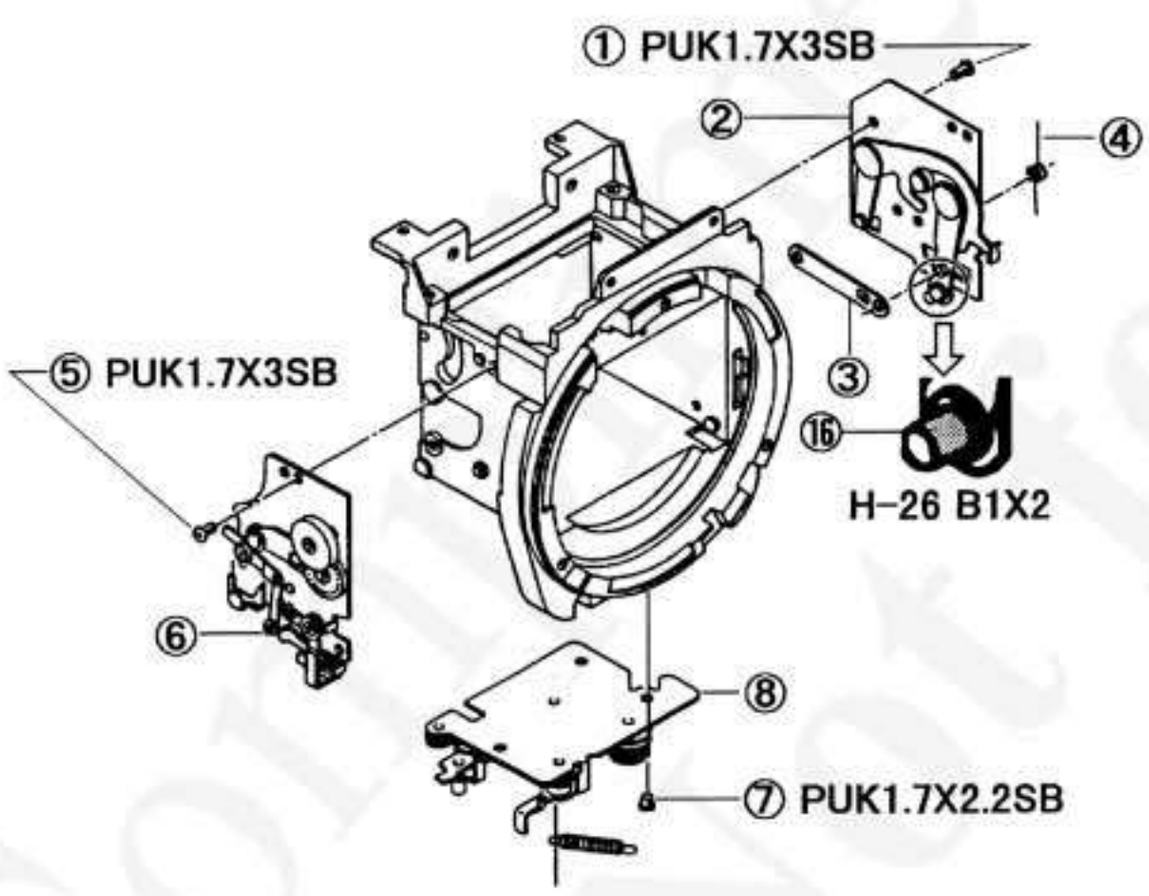
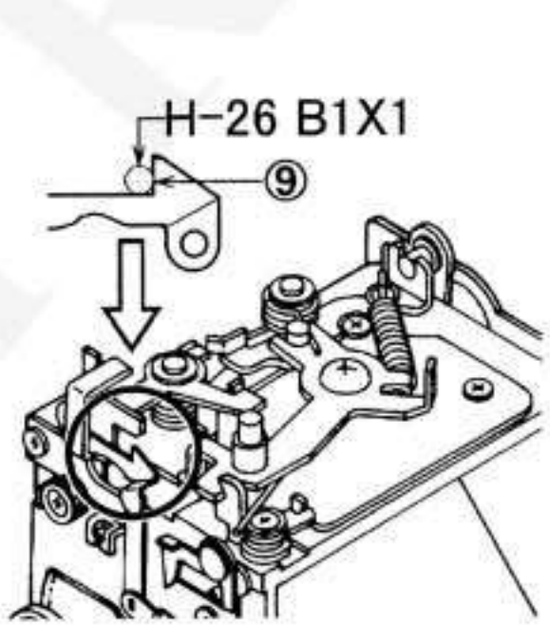


Fig-2



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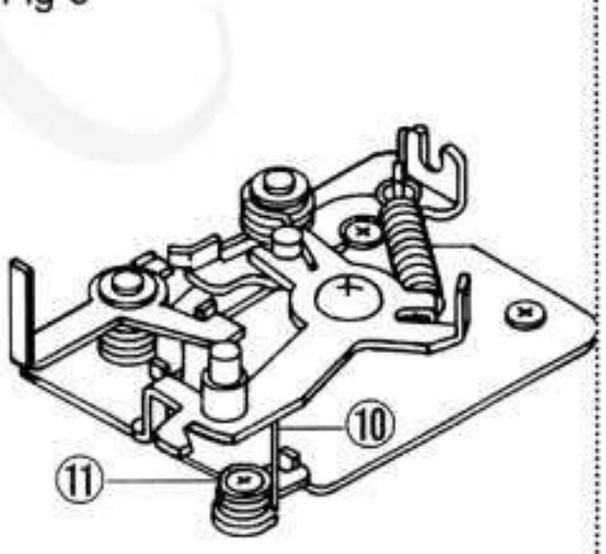
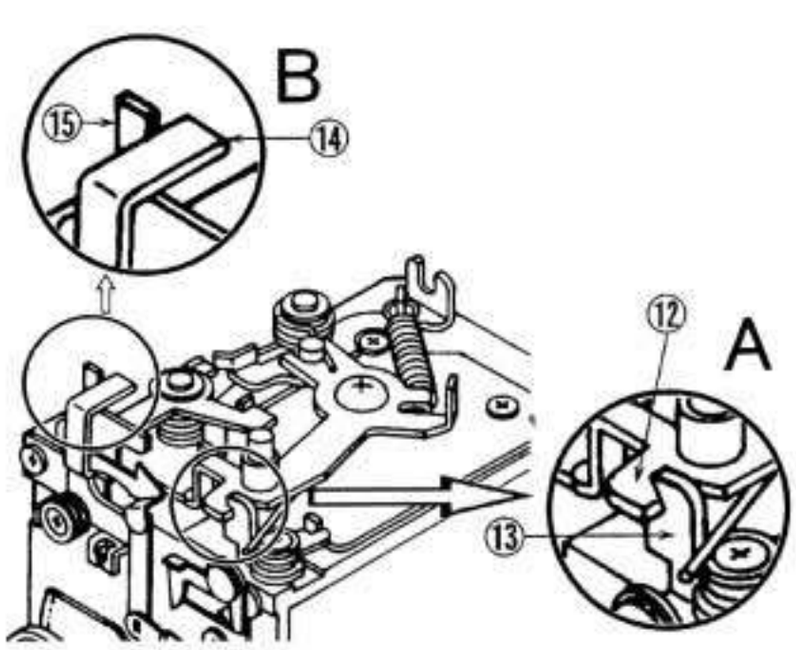


Fig-4



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9. Removal and installation of the mirror

〔Disassembly procedure〕

1) While holding the M spring ① by tweezers, slide the M shaft ② until it is removed and take off the mirror. (Fig-1)

Take care not to lose the M spring.

〔Assembly procedure〕

1) Insert the tip ③ of the M spring into the rubber ④ of the mirror and install the mirror on the front casting. (Fig-1,2)

2) Slide the M shaft ② to the position pointed by **a**. (Fig-3)

3) While making space between the mirror and front casting, hook the M spring ① to the screen-side of the front casting and install the M shaft ② completely. (Fig-3)

Fig-1

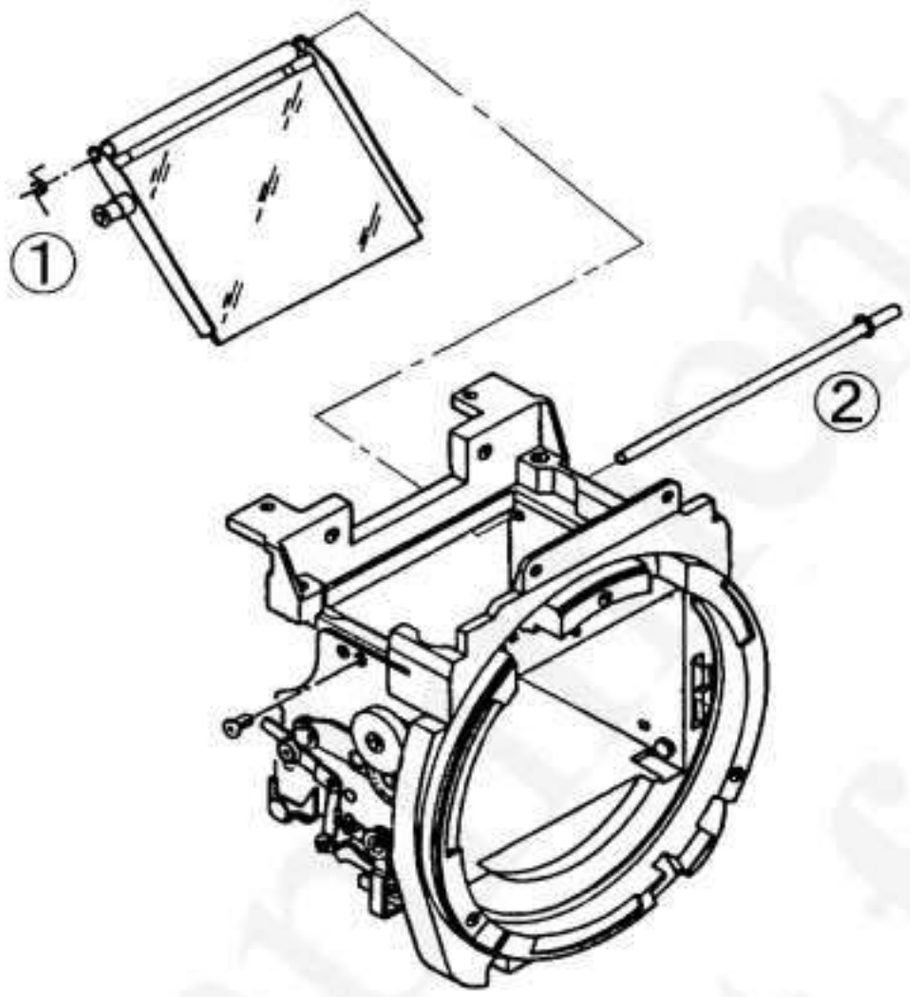


Fig-2

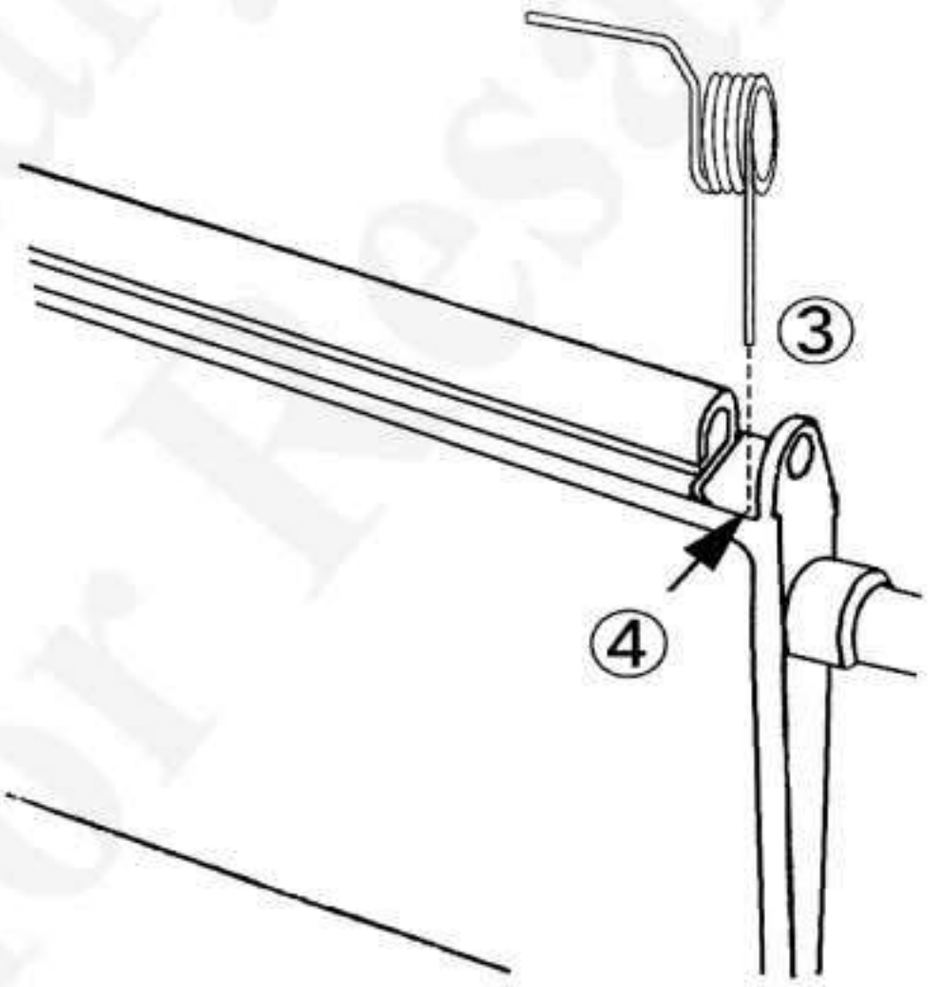
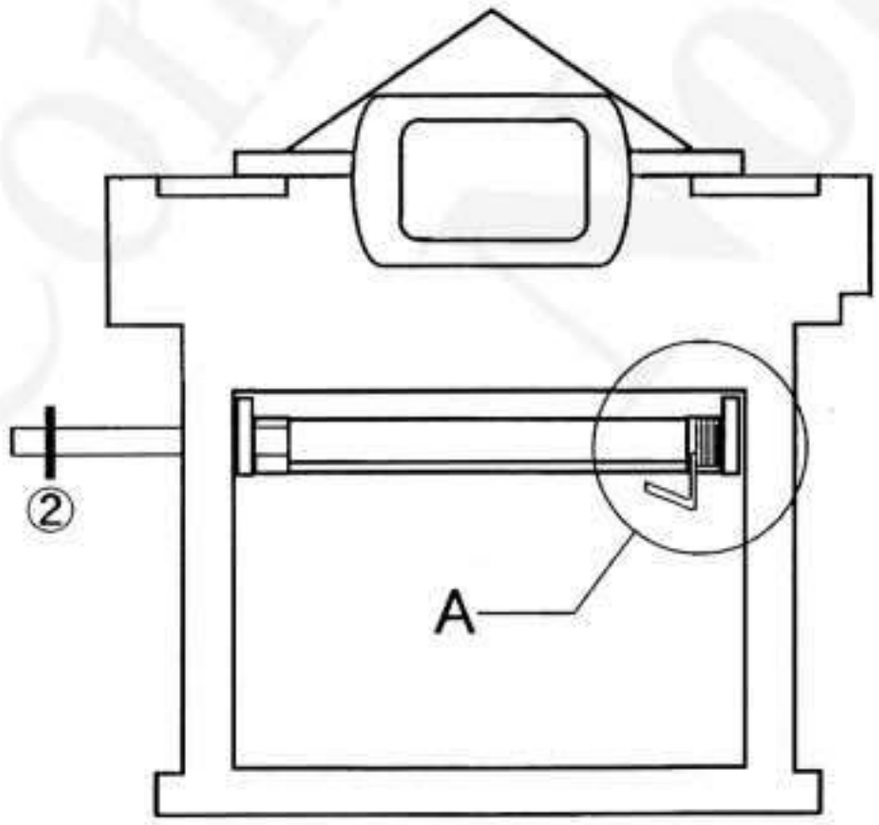
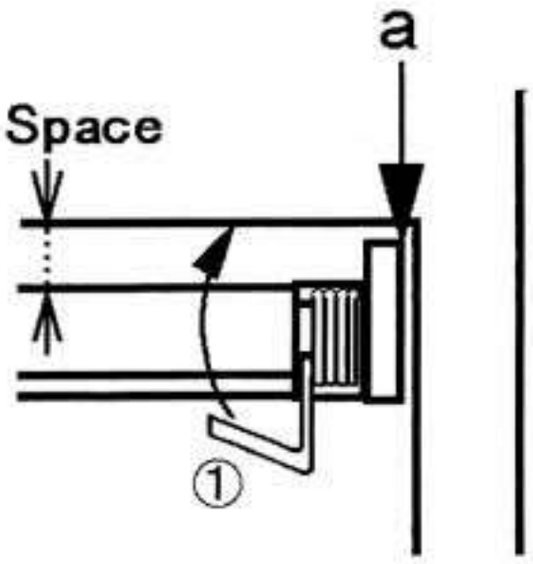


Fig-3





Magnified figure showing portion A

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10. Removal and installation of the shutter

[Disassembly procedure]

1) Remove the red wire ① on the B case. (Fig-1)

2) Remove a screw ② and take off the B contact ③ and B case ④. (Fig-2)

3) Remove the C screw ⑤ and take off the charge lever ⑥ and charge spring ⑦. (Fig-2)

4) Remove the RL screw ⑧ and take off the release plate ⑨. (Fig-3)

5) Remove three screws ⑩⑪ and take off the shutter ⑫. (Fig-3)

[Assembly procedure]

1) Install the shutter while it is charged, and fasten it with three screws ⑩⑪. (Fig-3)

2) Install the release plate ⑨ and fasten it with the screw RL ⑧. (Fig-3)

3) Apply grease (H-26) to the charge lever ⑥. (Fig-2)

4) Install the charge spring ⑦ on the charge lever ⑥ and fasten it with the C screw ⑤. (Fig-2)

5) Install the B case ④ and B contact ③, and fasten them with the screw ②.
Install the charge spring ⑦. (Fig-2)

6) Solder the red lead wire ① on the B case. (Fig-1)

Fig-1

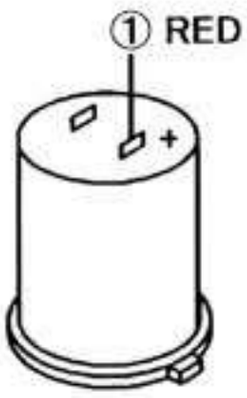


Fig-3

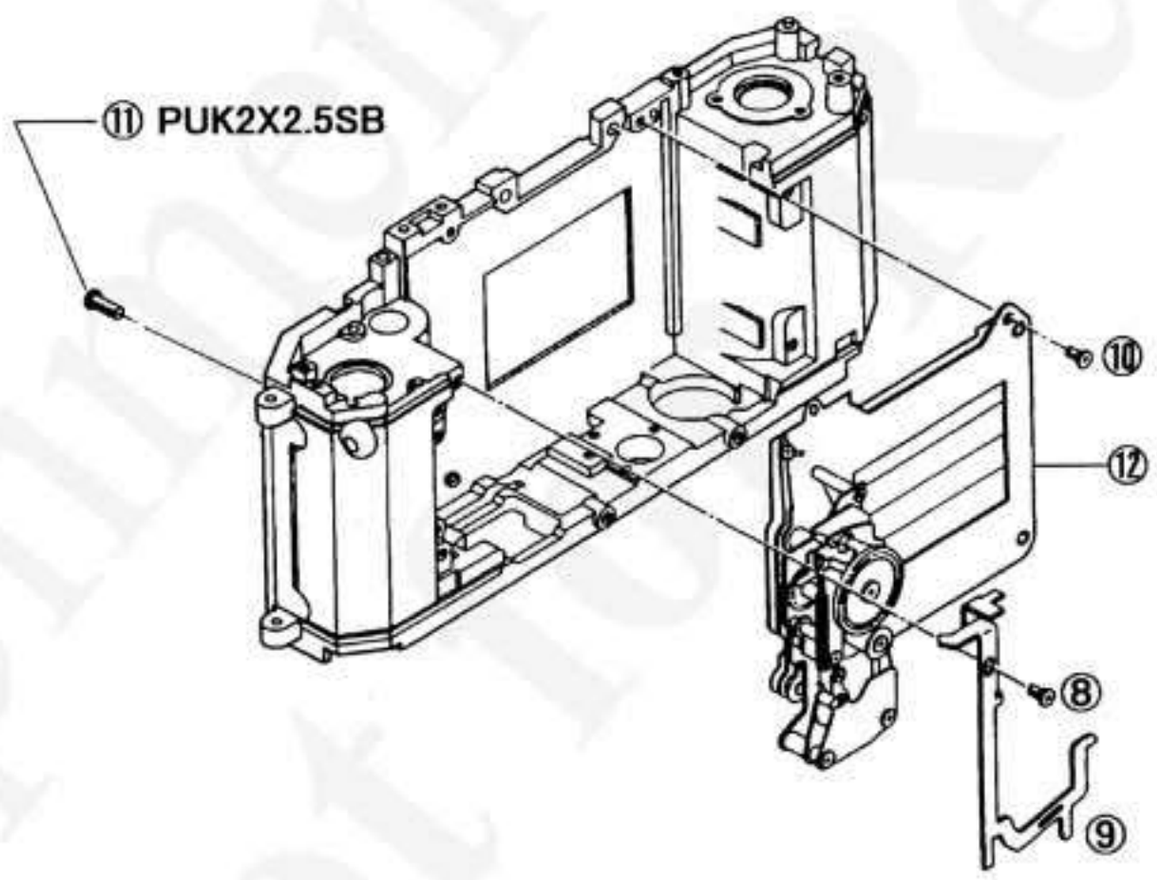
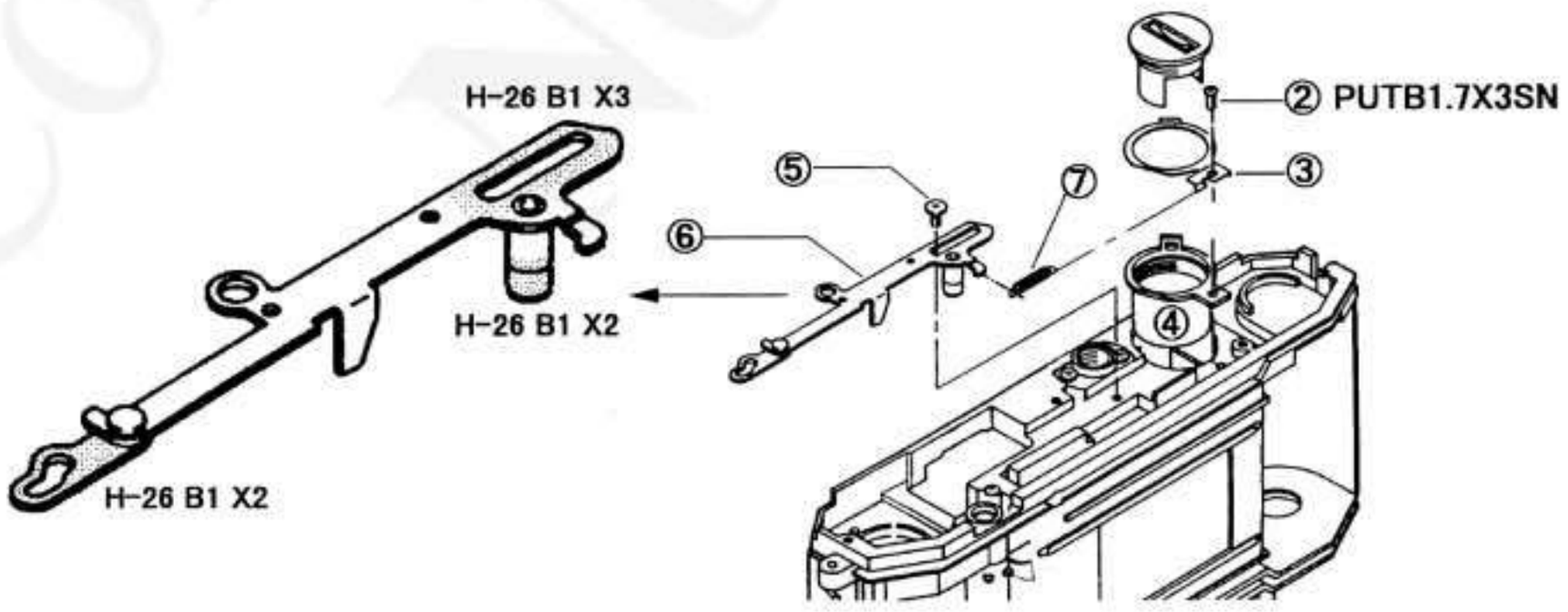


Fig-2



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11. Removal and installation of the spool, counter and winding shaft

〔Disassembly procedure〕

1) Remove the ST screw ① and take off the unit of the C plate ② and shaft collar ③. (Fig-1)

2) Remove three screws ④ and take off the W shaft holder ⑤, spool ⑥, and spool spring ⑦. (Fig-1)

3) While halfway winding, remove two screw ⑧ and take off the counter unit ⑨. (Fig-2)

4) Remove the lever spring ⑩ and winding shaft ⑪. (Fig-2)

〔Assembly procedure〕

1) Install the spool ⑥ and spool spring ⑦. (Fig-1)

2) After Applying grease (H-26) to the sliding parts of the spool in the W shaft holder ⑤ and shaft collar ③, install and fasten them with the three screws ④. (Fig-1)

3) Apply grease (H-26) to the winding shaft ⑪, and install it on the body casting with its check turning away. (Fig-2)

4) Install the lever spring ⑩ on the winding shaft ⑪, and hook the tip of the lever spring to the hook ⑬ on the body casting. (Fig-2,3)

5) Install the shaft collar ③ and unit of the C plate ② with the winding shaft forced to turn counterclockwise about 120 degrees (until an oval of the shaft ⑭ is set vertically). (Fig-1,4)

6) Apply screw lock (PERMA-LOK) to the thread of the ST screw ① and fix the unit of the C plate ②. (Fig-1)
You must apply screw lock so that the screw may not loose while winding.

7) While halfway winding, install the counter unit ⑨ with the notch of the counter shaft ⑮ facing to the center of the winding shaft, and fasten it with the two screws ⑧. (Fig-2,5)

Fig-1

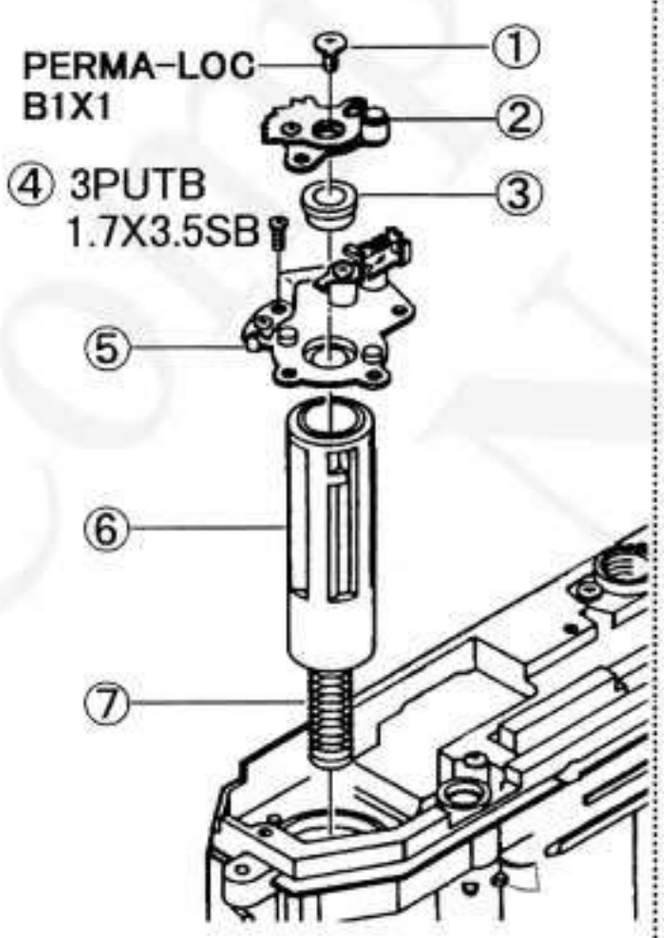


Fig-2

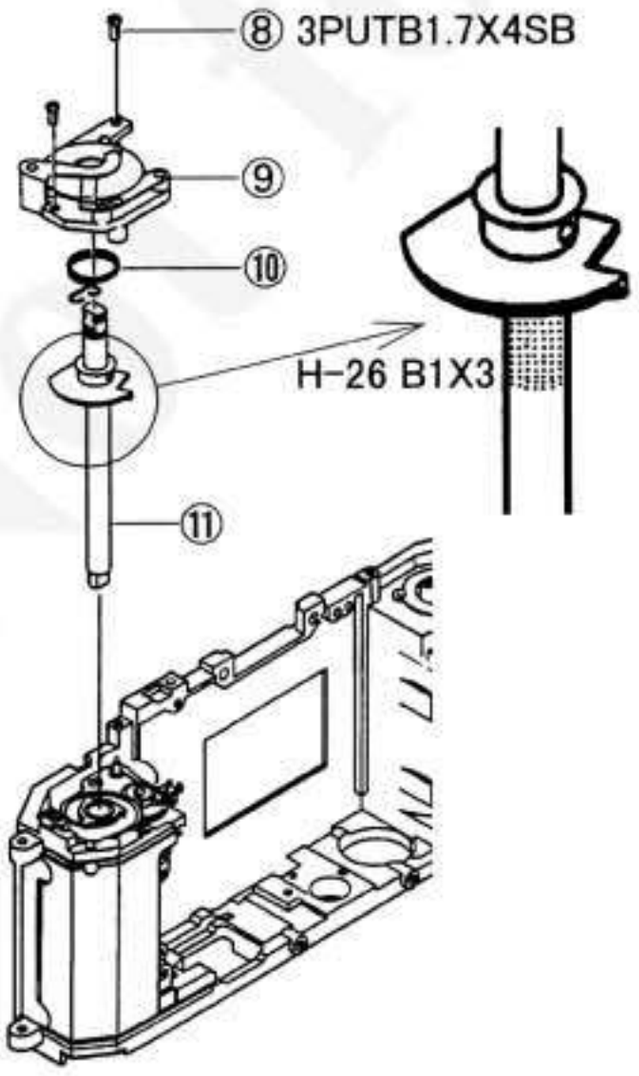


Fig-3

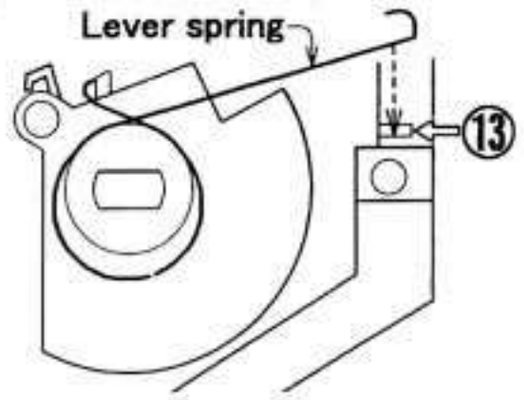


Fig-4

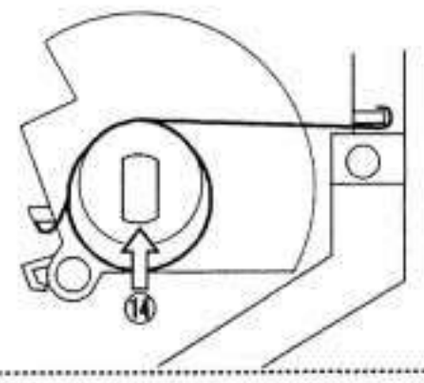
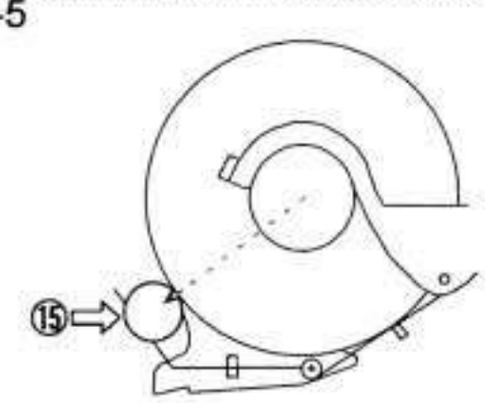


Fig-5



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12. Removal and installation of the sprocket

〔Disassembly procedure〕

1) Remove two screws ①② and take off the W plate ③.
The spool gear ④, ST gear ⑤, ST spring ⑥, and ST shaft ⑦ are to be removed. (Fig-1)

2) Remove a screw ⑧ and take off the ST release ⑨ and ST shaft holder ⑩.
The sprocket ⑪ is to be removed. (Fig-2)

〔Assembly procedure〕

1) Apply grease (H-26) to the ST shaft holder ⑩ . (Fig-2)

2) Install the sprocket ⑪, ST shaft holder ⑩, and ST release ⑨, and fasten them with the screw ⑧. (Fig-2)

3) Apply grease (H-26) to the ST shaft ⑦ and ST gear ⑤. (Fig-1)

4) Install the ST shaft ⑦, ST spring ⑥, ST gear ⑤, spool gear ④, and W plate ③, and then fasten them with the two screws ①②. (Fig-1)

Fig-1

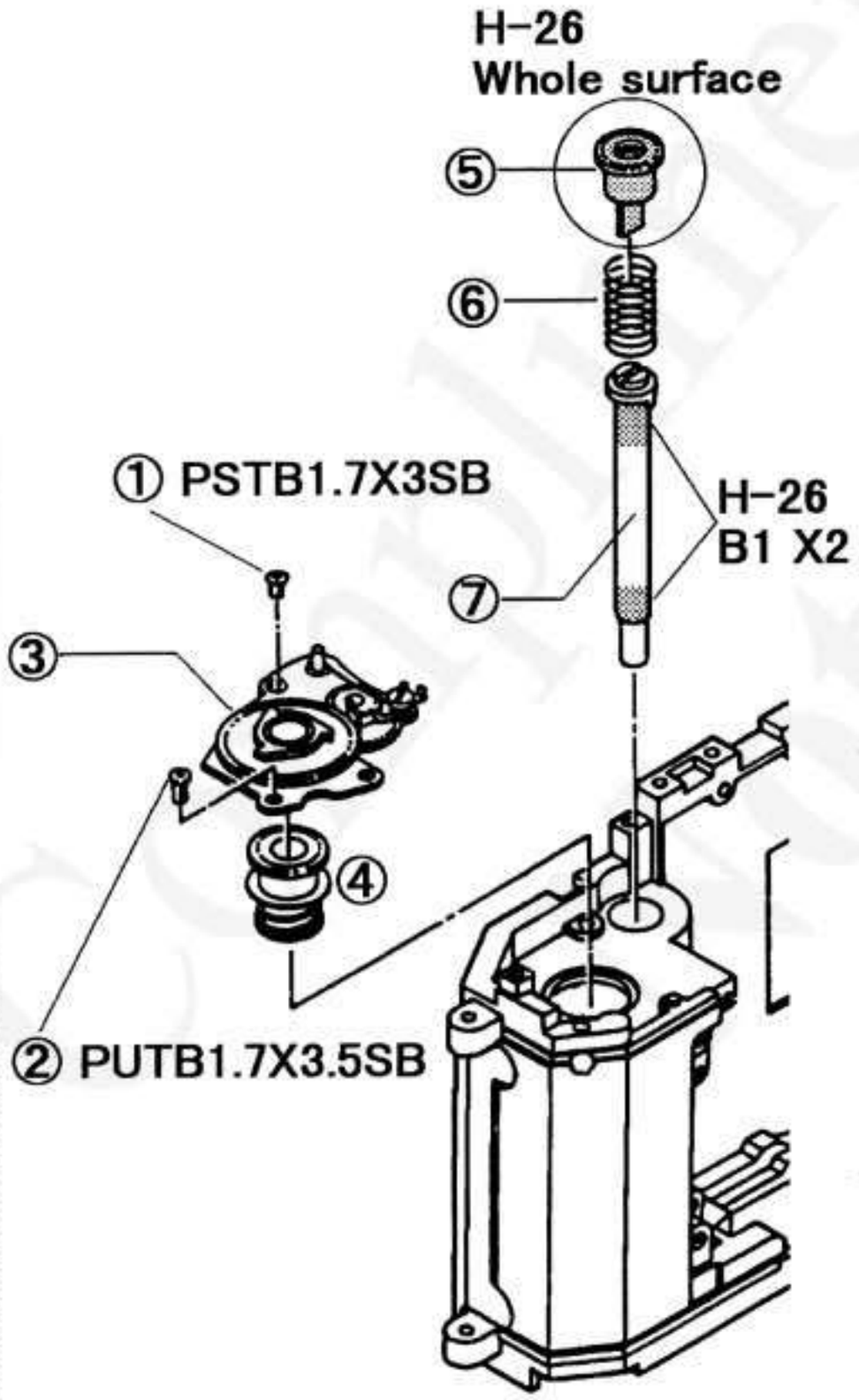
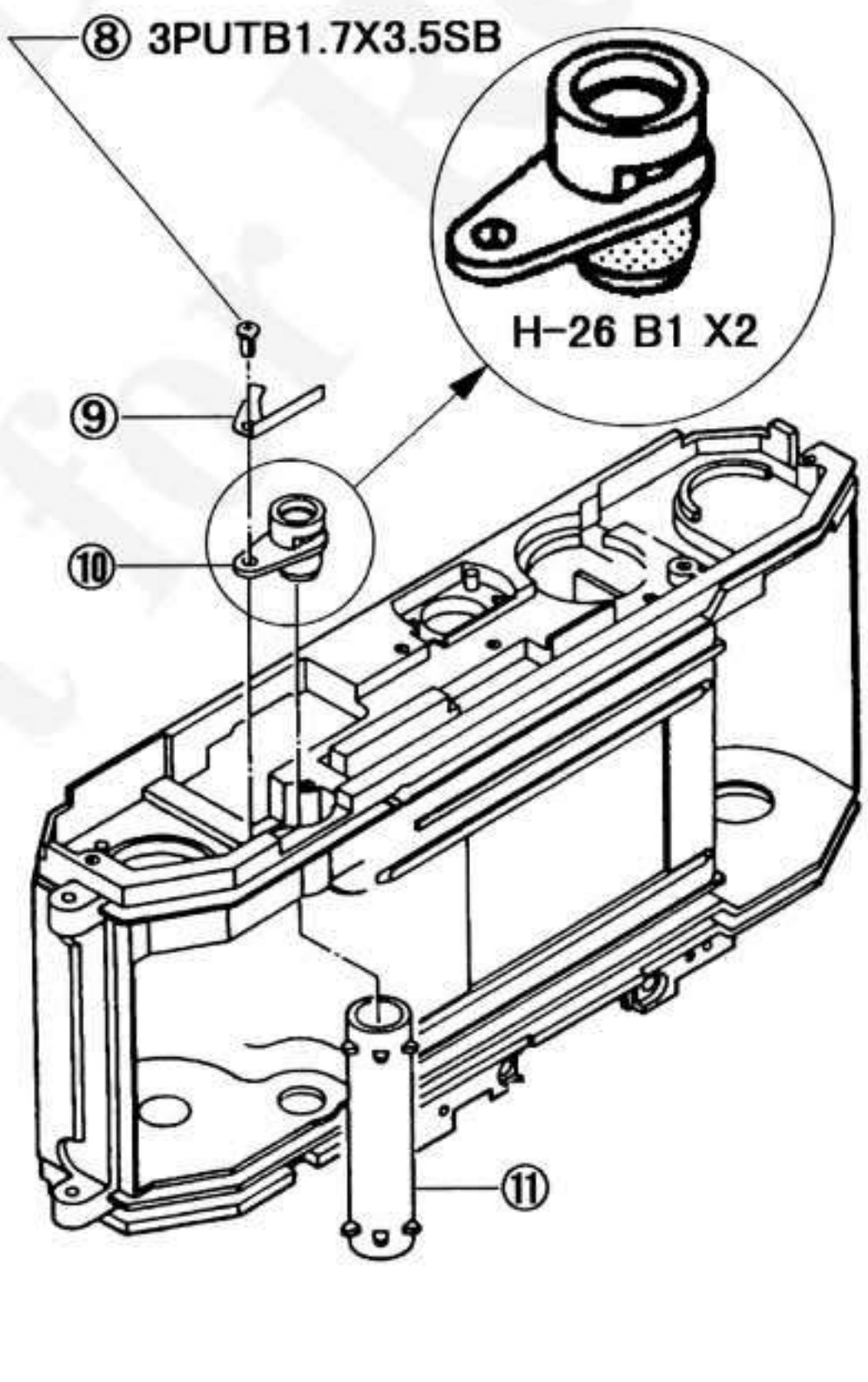


Fig-2



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13. Removal and installation of the R shaft holder and AS PCB

〔Disassembly procedure〕

1) Remove two screws ① and take off the AS spring ② and AS base ③. (Fig-1)

2) Remove two screws ④⑤ and take off the key spring ⑥, AS PCB ⑦, R shaft holder ⑧, and R collar ⑨. (Fig-1)

3) Remove two ⑩ screws and take off the key cover ⑪, key collar ⑫, and key plate ⑬. (Fig-1)

〔Assembly procedure〕

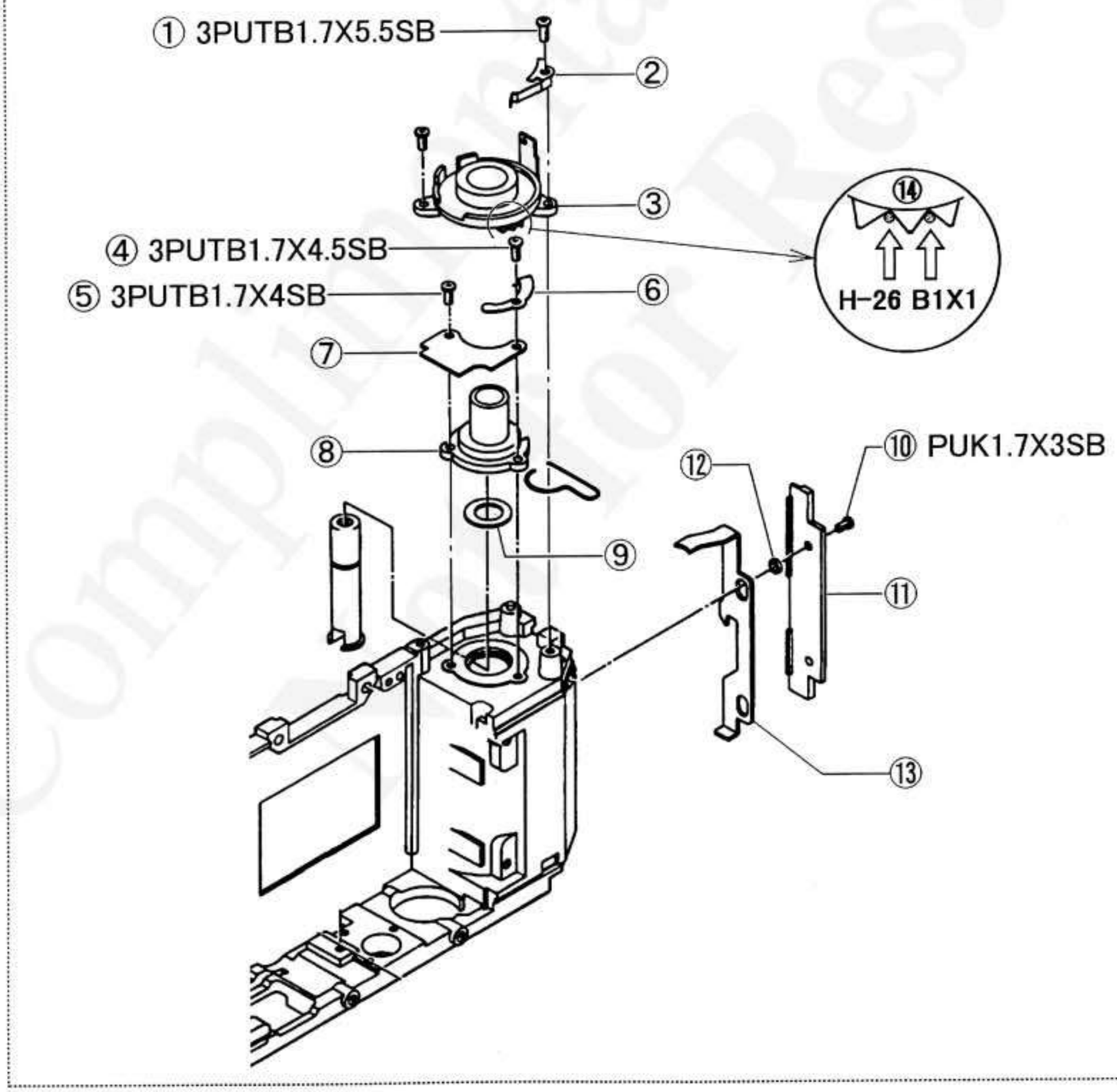
1) Install the key collar ⑫, key plate ⑬, and key cover ⑪, and then fasten them with the two screws ⑩. (Fig-1)

2) Install the R collar ⑨, R shaft holder ⑧, AS PCB ⑦, and key spring ⑥, and then fasten them with the two screws ④⑤. (Fig-1)

3) Apply grease (H-26) to the click portion ⑭ of the AS base. (Fig-1)

4) Install the AS base ③ and AS spring ②, and then fasten them with the two screws ①. (Fig-1)

Fig-1



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C.ADJUSTMENT METHOD

[1] Adjustment method B-2

1. LED light adjustment B-2

1-1 How to make a jig top cover B-2

1-2 Preparation for adjustment B-2

1-3 LED light adjustment
(when the luminance box is set at EV15, 11, and 9) B-3

1-4 LED light adjustment
(when the luminance box is set at EV15, 12, and 10) B-3

1-5 LED light adjustment
(when the luminance box is set at EV15, 12, and 9) B-3

2. Release position adjustment B-4

3. SD click adjustment B-5

4. BULB adjustment B-6

5. Wind adjustment B-7

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7. Finder focus adjustment B-9

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[1] Adjustment method

1. LED light adjustment

*** Use a jig top cover for adjustment to prevent the SPD from voltage variation caused by outside noises and others when doing the adjustment.**

1-1 How to make a jig top cover.

Cut the fore-side of the projection in the prism on the top cover. (Fig-1)

1-2 Preparation for adjustment

1.) Load the camera with batteries.
2.) Solder the lead wire of approx. 5 cm in length to the test-point ① on the M FPC. (Fig-2)
3.) Install the jig top cover and fasten it with four screws.
4.) Install the shutter dial and ISO dial. (See Disassembly and assembly procedure 3-4)
5.) Connect the (+) tester of the voltmeter with the lead wire.
6.) Connect the (-) tester of the voltmeter with the strap eyelet (GND) on the camera body.
7.) While holding the release switch by an alligator clip, turn on the main switch. (Fig-3)
8.) Install the jig lens (MS-5018)
9.) Use a conductive driver for VR adjustment.

Fig-1

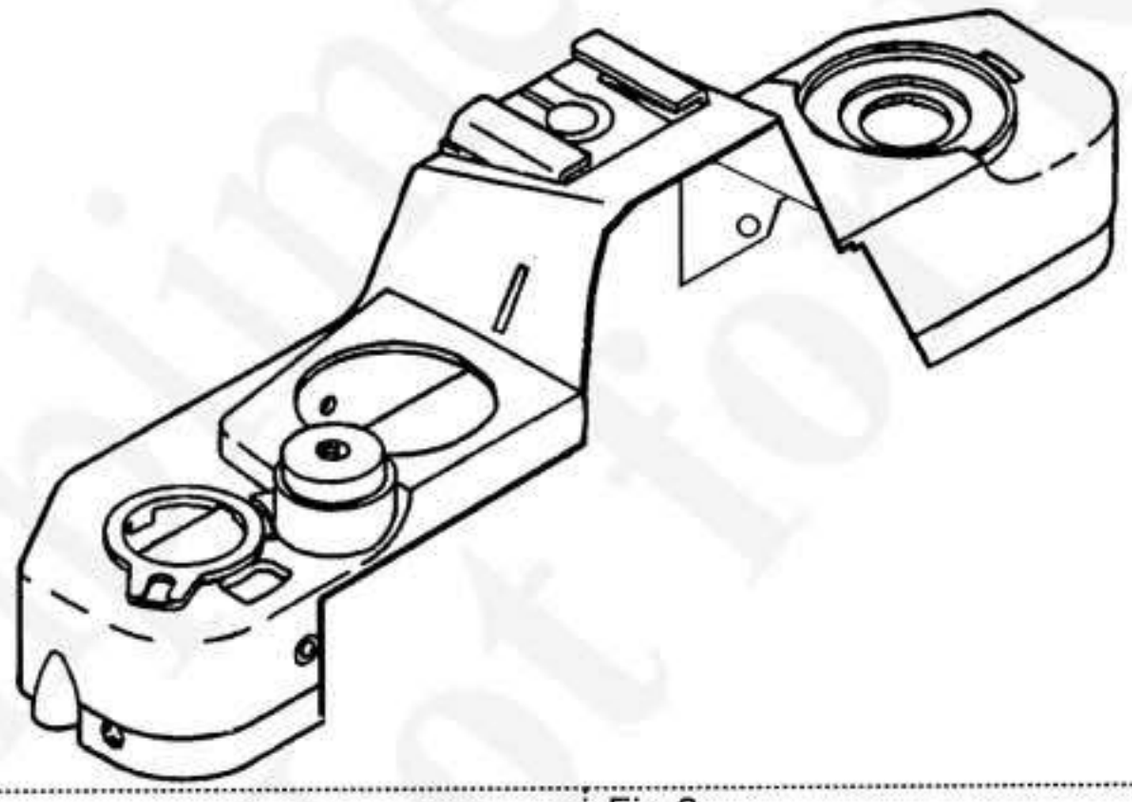


Fig-2

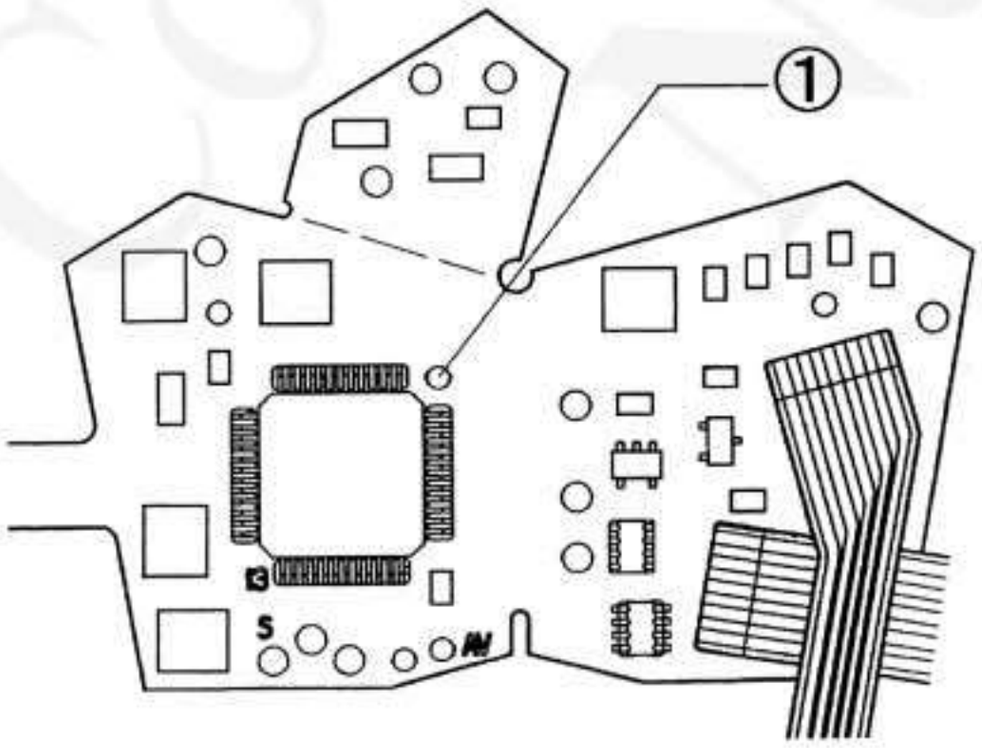
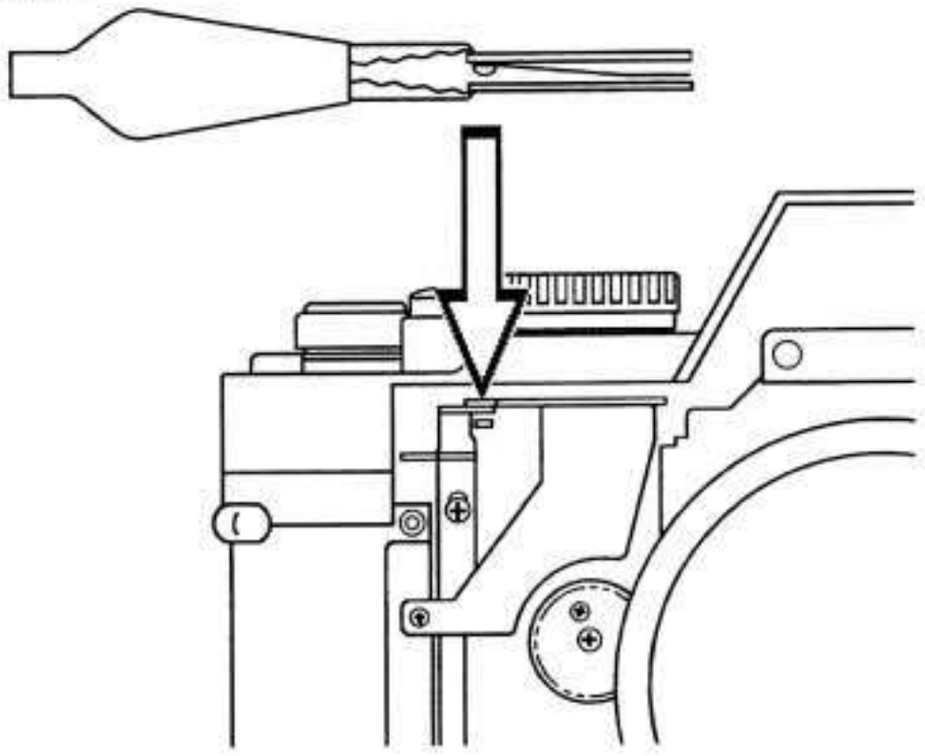


Fig-3



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1-3 LED light adjustment (when the luminance box is set at EV15, 11, and 9)

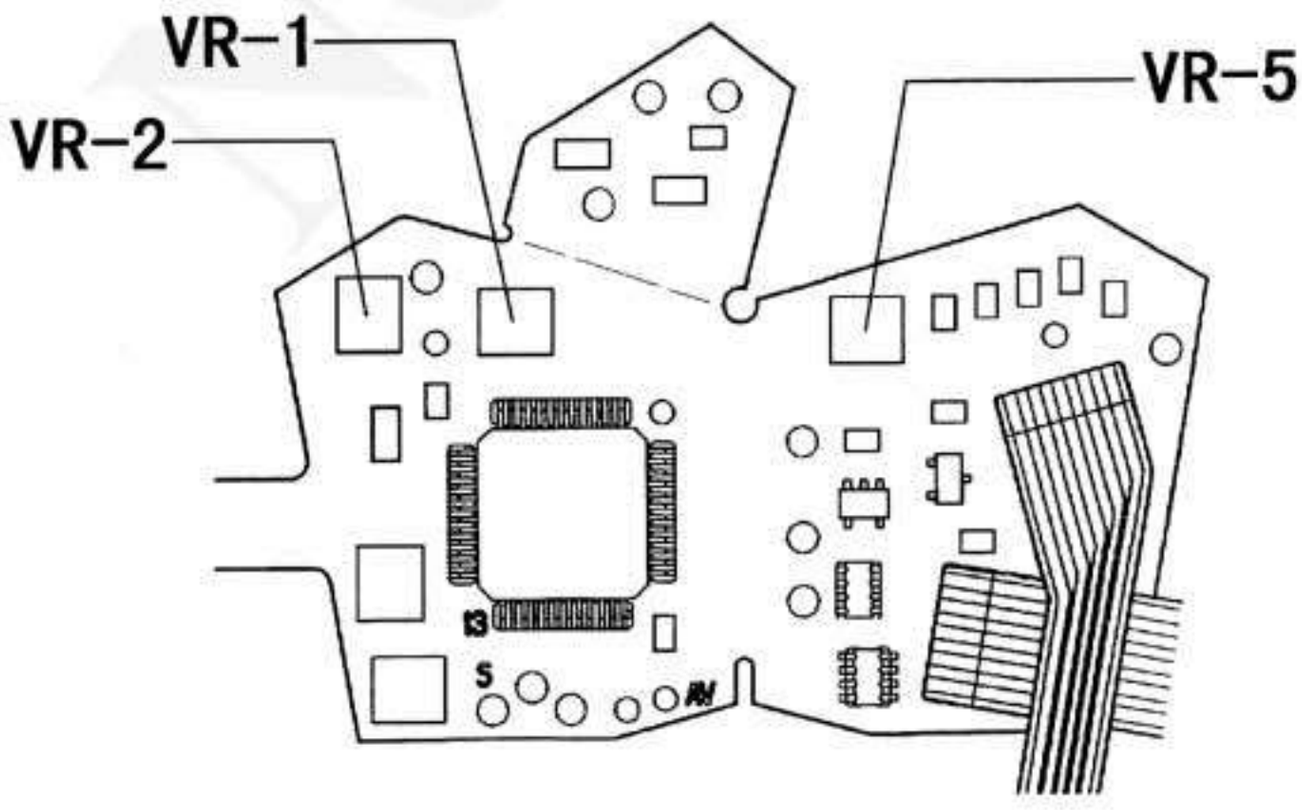
1.) Set the photometry mode at average, shutter speed at 1/125, and lens at F5.6 and select ISO 100, and then install in the luminance box. (Cover the camera with a shade cloth)
2.) Read a voltage ① of the voltmeter when the luminance box is set at EV15.
3.) Set the luminance box at EV9, and adjust VR-5 so that the voltage is lower than voltage ① by 108±2mv.
4.) Set the shutter speed of the camera at 1/60.
5.) Set the luminance box at EV11, adjust VR-1 so that only proper exposure LED(green LED) lights, and then read the voltage ②.
6.) Set the photometry mode at spot, and adjust VR-2 so that the voltage is same as the voltage ②±2mV.

1-4 LED light adjustment (when the luminance box is set at EV15, 12, and 10)

1.) Set the photometry mode at average, shutter speed at 1/125, and lens at F5.6 and select ISO 100, and then install in the luminance box. (Cover the camera with a shade cloth)
2.) Read a voltage ① of the voltmeter when the luminance box is set at EV15.
3.) Set the luminance box at EV10, and adjust VR-5 so that the voltage is lower than voltage ① by 90±2mv.
4.) Set the luminance box at EV12, adjust VR-1 so that only proper exposure LED(green LED) lights, and then read the voltage ②.
5.) Set the photometry mode at spot, and adjust VR-2 so that the voltage is same as the voltage ②±2mV.

1-5 LED light adjustment (when the luminance box is set at EV15, 12, and 9)

1.) Set the photometry mode at average, shutter speed at 1/125, and lens at F5.6 and select ISO 100, and then install in the luminance box. (Cover the camera with a shade cloth)
2.) Read a voltage ① of the voltmeter when the luminance box is set at EV15.
3.) Set the luminance box at EV9, and adjust VR-5 so that the voltage is lower than voltage ① by 108±2mv.
4.) Set the luminance box at EV12, adjust VR-1 so that only proper exposure LED(green LED) lights, and then read the voltage ②.
5.) Set the photometry mode at spot, and adjust VR-2 so that the voltage is same as the voltage ②±2mV.



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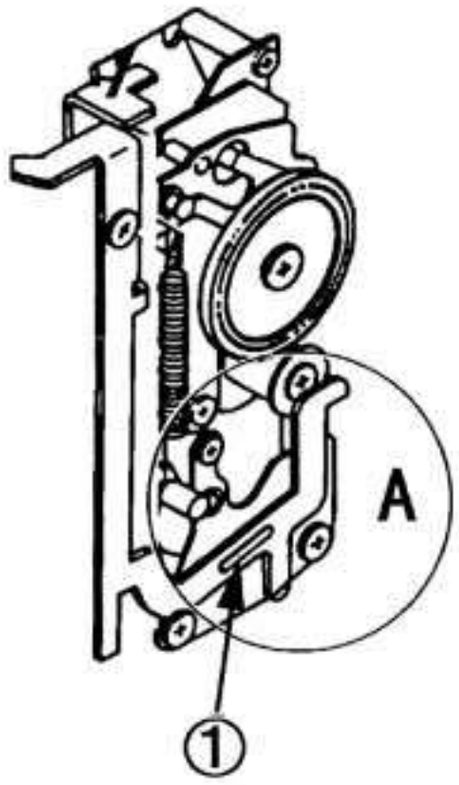
2. Release position adjustment

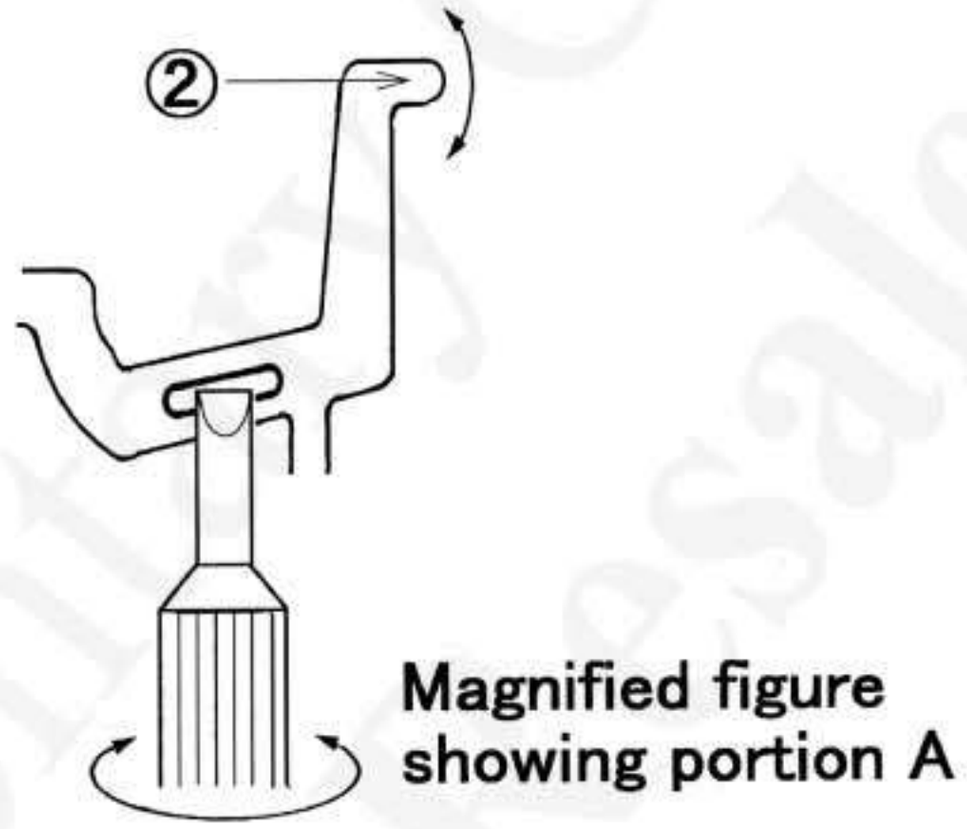
[Check method]

Press the release plate slowly so that it goes down approx. 0.2 mm after the mirror starts to operate.

[Adjustment method]

Insert a minus driver into the guide hole ① of the release plate, and go up and down the tip of the release plate to adjust the mirror start position.





3. SD click adjustment

※SD unit must be installed.

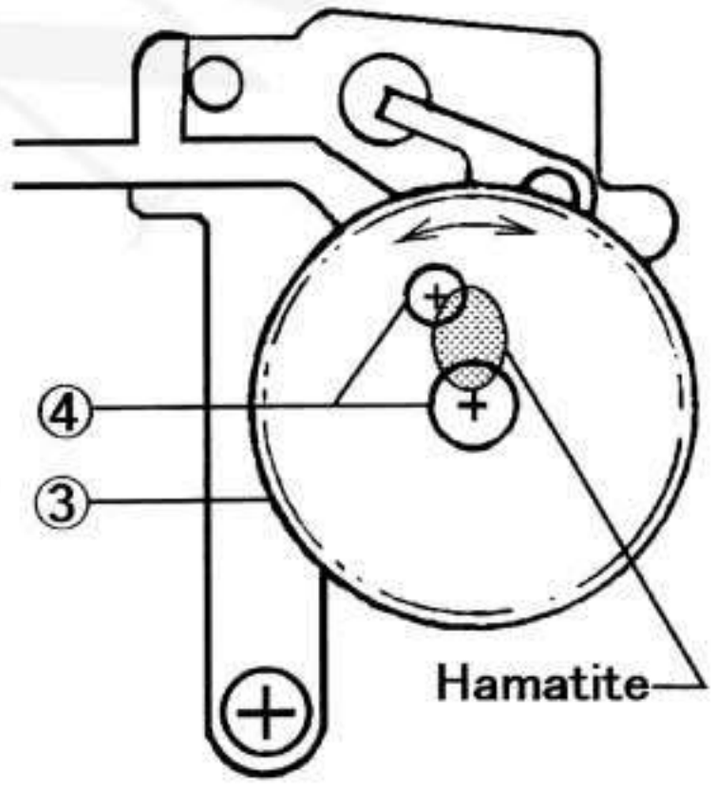
[Check method]

Turn a shutter-dial fully both clockwise and counter-clockwise to check whether it clicks normally.

[Adjustment method]

Loosen two screws ④ on the transmission gear ③ of the shutter and change the backlash position of the transmission gear

After the adjustment, fasten the two screws(4) and glue them with Hamatite.



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4. BULB adjustment

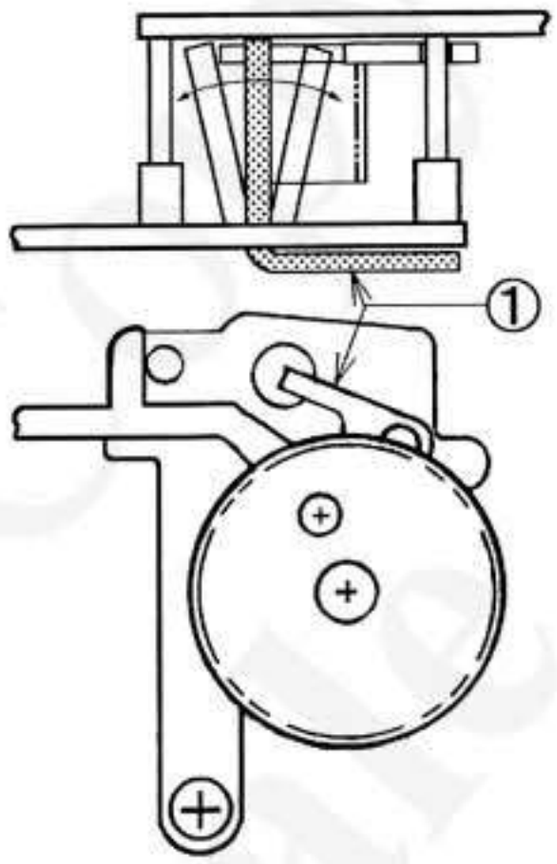
※The top cover and SD unit must be removed.

[Check method]

1) Press the release plate slowly and quickly so that it is set without fail at BULB.

2) Return the release plate slowly and quickly so that the BULB is discharged.

3) Return the release plate slowly so that it has space after the 2nd curtain starts operating (after the operation stops).



[Adjustment method]

Adjustment by bending the 2nd curtain hold lever ①.

5. Wind adjustment

[Check method]

1) There must be a gap (A) of approx. 0.2 mm between the ratchet lever ② and charge plate ③ after winding and with the winding lever not returned.

2) There must be a gap (B) of approx. 0.2 mm between the ratchet lever ④ and charge plate ⑤ after the return of the winding lever. (A) =(B)

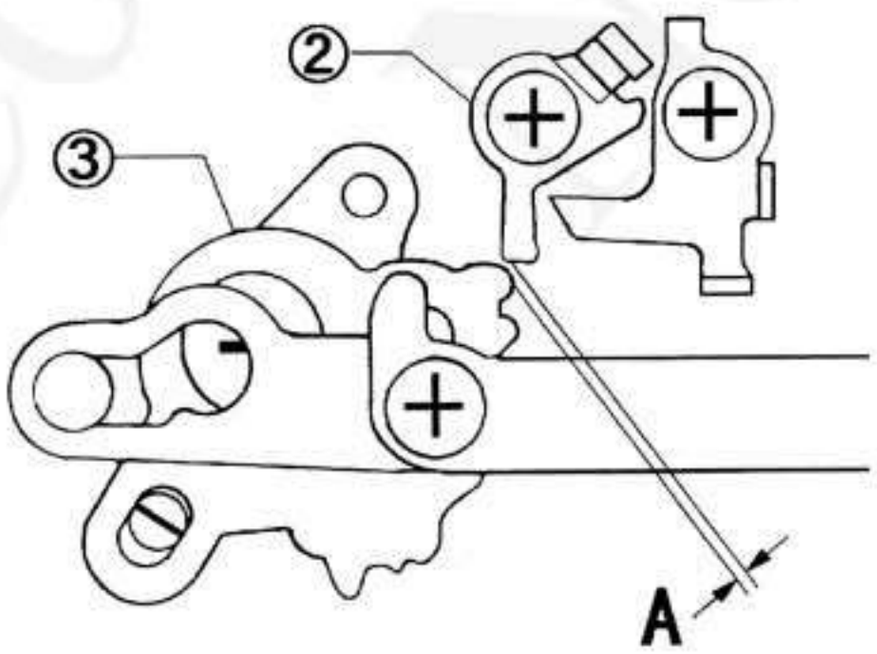
3) There must be a gap of approx. 0.1 to 0.3 mm between the ratch of the charge lever ⑥ and projection of the reset lever ⑦ after the return of the winding lever.

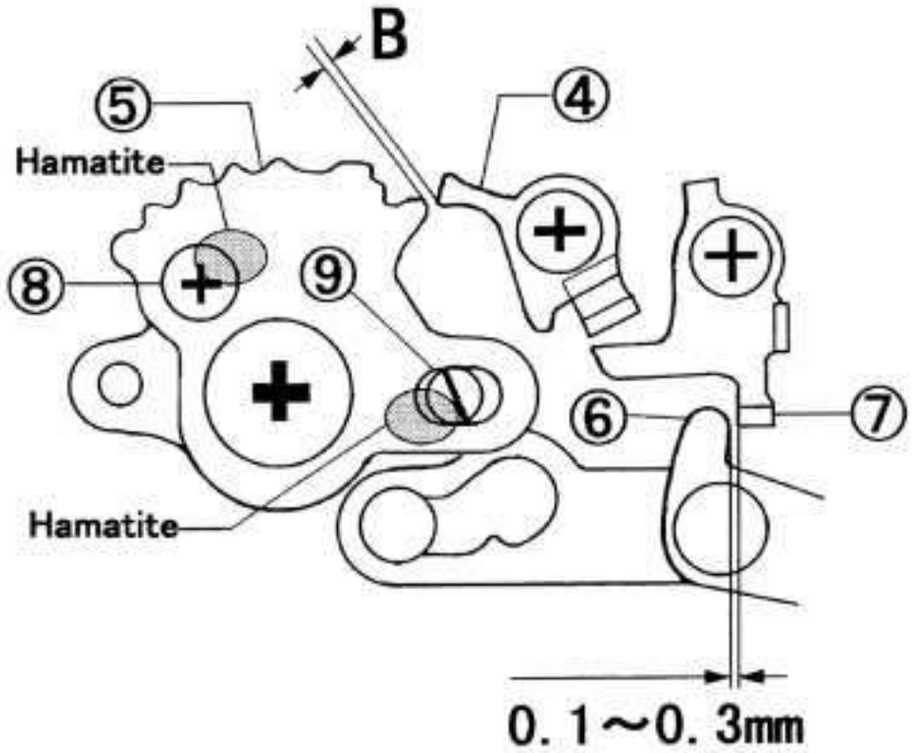
[Adjustment method]

1) Loosen a screw ⑧ on the charge plate ⑤ and turn the eccentric screw ⑨ to be set at (A)=(B)≒ 0.2mm.

2) Bend the projection of the reset lever ⑦ and adjust the gap between the ratch of the charge lever ⑥ and this portion to be approx. 0.1 to 0.3mm.

3) After the adjustment, apply HAMATITE to heads of the screw ⑧ and eccentric screw ⑨.





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6. Film counter adjustment

[Check method]

1) The counter counts one frame while halfway winding.

2) The counter must not count both just after and just before the winding operation is completed.

[Adjustment method]

See Disassembly and assembly procedure (B-11).

7. Finder focus adjustment

[Check method]

1) Install the jig lens (MS-5018) on the camera and set the collimator at 500mm.

2) Look through the finder and check the infinity with the split-image in the center of the screen.

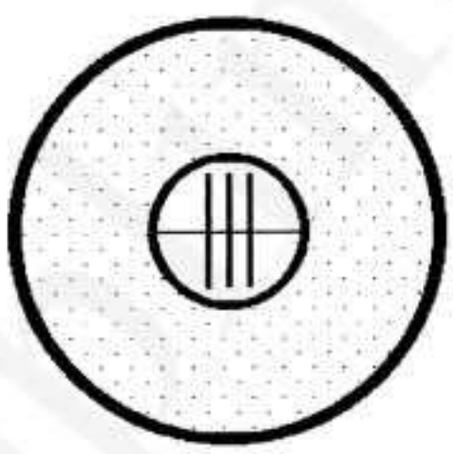
[Adjustment method]

Turn a hexagon nut ① inside the front casting and go up and down the mirror stop position to adjust finder focus.

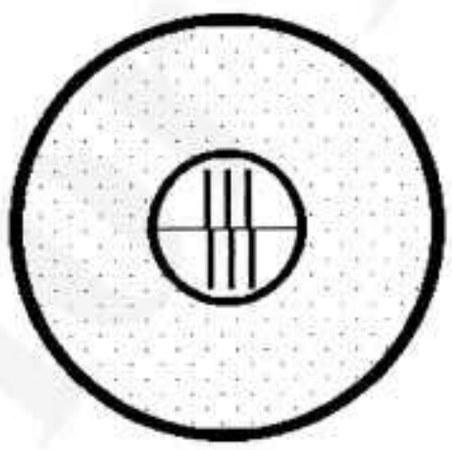
※ Do not loosen the screw ② on the M holder.

After the adjustment, release the shutter three to five times to check the focus.

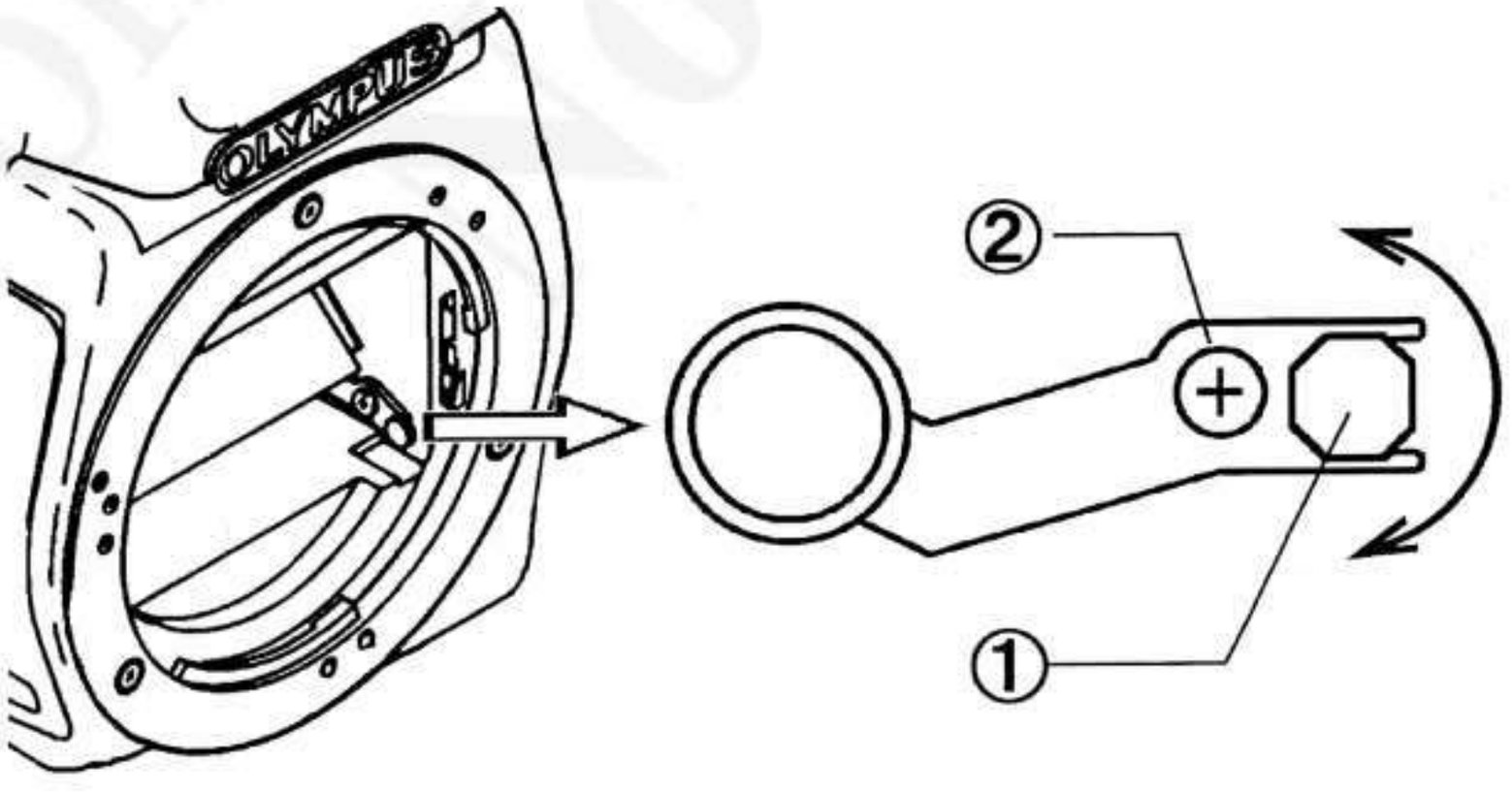
After the check, apply black flat paint to the hexagon nut.



OK



NG



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E. 変更通知書

E. NOTICE OF MODIFICATION

Pプレート対策 E-2

Countermeasure of the P plate

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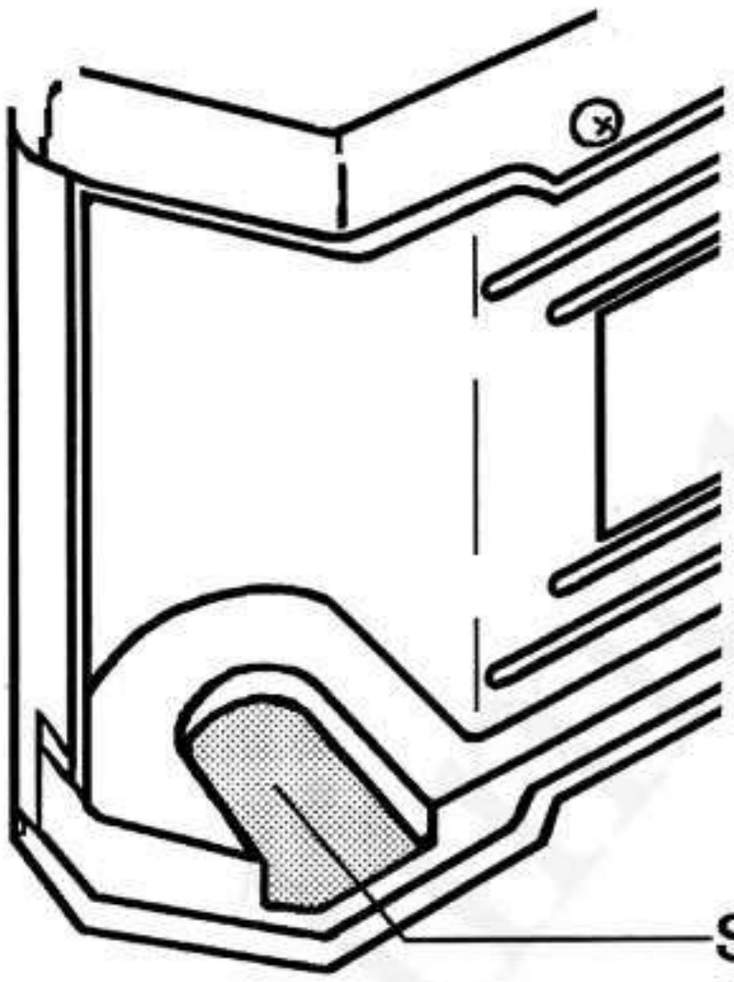
変更通知書
NOTICE OF MODIFICATION

件名 (SUBJECT)	Pプレート対策 Countermeasure of the P plate	JUL-4-1997

変更(DESCRIPTION)

P プレート (SC1696) をホンタイパトローネ室下面に貼る。
Stick the P plate (SC1696) on the bottom of film chamber.



当対策は生産初期より,恒久対策(ホンタイの型修正)が実施されるまでの暫定対策です。

This countermeasure is adopted early production only.

理由 (REASON)

フィルム,レール面乗り上げ対策

To prevent the film on the film rail of the camera.

部品管理 (PARTS SUPPLY)

分解図及びパーツリストには記載されませんので,ご注意ください。

This countermeasure parts does not list on the parts list and exploded parts diagram.

備考 (REMARKS)

http://olympus.dementia.org/Hardware

F. APPLICATION LIST OF GREASES AND CHENICALS

[1] ADHESIVES

1. HAMATITE (OT1125) ..... C-4 (3.SD click adjustment)
   ..... C-5 (5.Wind adjustment)
2. SUPER X BLACK (OT1899) B-5 (Fig-1)
   ..... B-6 (Fig-4)
3. PERMA-LOK (OT1568) B-11 (Fig-1)

[2] GREASE

1. H-26 (OT2133) B-3 (Fig-2)
   ..... B-4 (Fig-1)
   ..... B-5 (Fig-3)
   ..... B-8 (Fig-1.2)
   ..... B-10 (Fig-2)
   ..... B-11 (Fig-1.2)
   ..... B-12 (Fig-1.2)
   ..... B-13 (Fig-1)

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H. DESCRIPTION OF MECHANISM

[1] Description of mechanism H-2

1. **Exposure meter interlocking range.....H-2**
2. **Multi exposure.....H-2**
3. **Diaphragm, mirror and shutter operations.....H-2**

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[1] Description of the mechanism

1. Exposure meter interlocking range

EV2 to 19(ISO100)

Ranges of shutter speeds interlocking the exposure meter at each film sensitivity are as follows.
The screened ranges do not interlock the exposure meter even though the LED lights.

Film (ISO)	Shutter speeds (sec.)											
25	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500		
50	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	
100	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	1/2000
200		1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	1/2000
400			1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	1/2000
800				1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	1/2000
1600					1/15	1/30	1/60	1/125	1/250	1/500	1/1000	1/2000
3200						1/30	1/60	1/125	1/250	1/500	1/1000	1/2000

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2. Multi exposure

While holding the ME lever in the direction of the index until it stops, turn the winding lever.
If the index begins to be concealed, release the ME lever and turn the winding lever until it stops.
The film counter does not work during this operation.

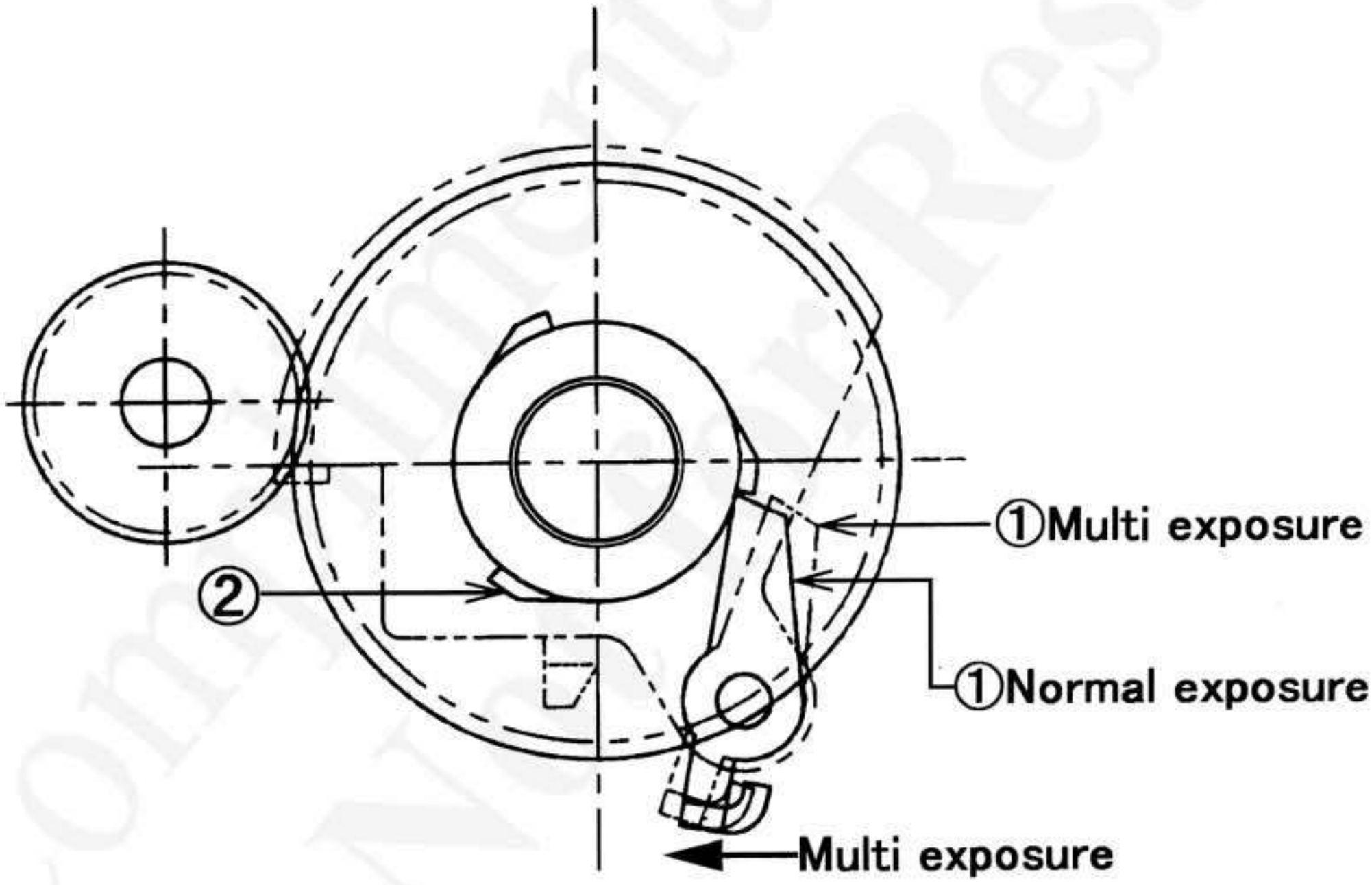
[Description of mechanism]

At normal winding operation, the hook in the rear of the winding shaft ① is hanged by stoppers on the W gear ②, and which turns the W gear together with the winding shaft to do winding, shutter charging and mirror charging operations.

The W gear has three stoppers ② and turns counterclockwise 120 degrees by one winding operation.

Winding with the ME lever pressed by a finger does not allow the hook of the winding shaft to be hanged by stoppers on the W gear, and then the film is not wound.

But the winding shaft turns and which permits the shutter and mirror to be charged and multi exposure to operate.



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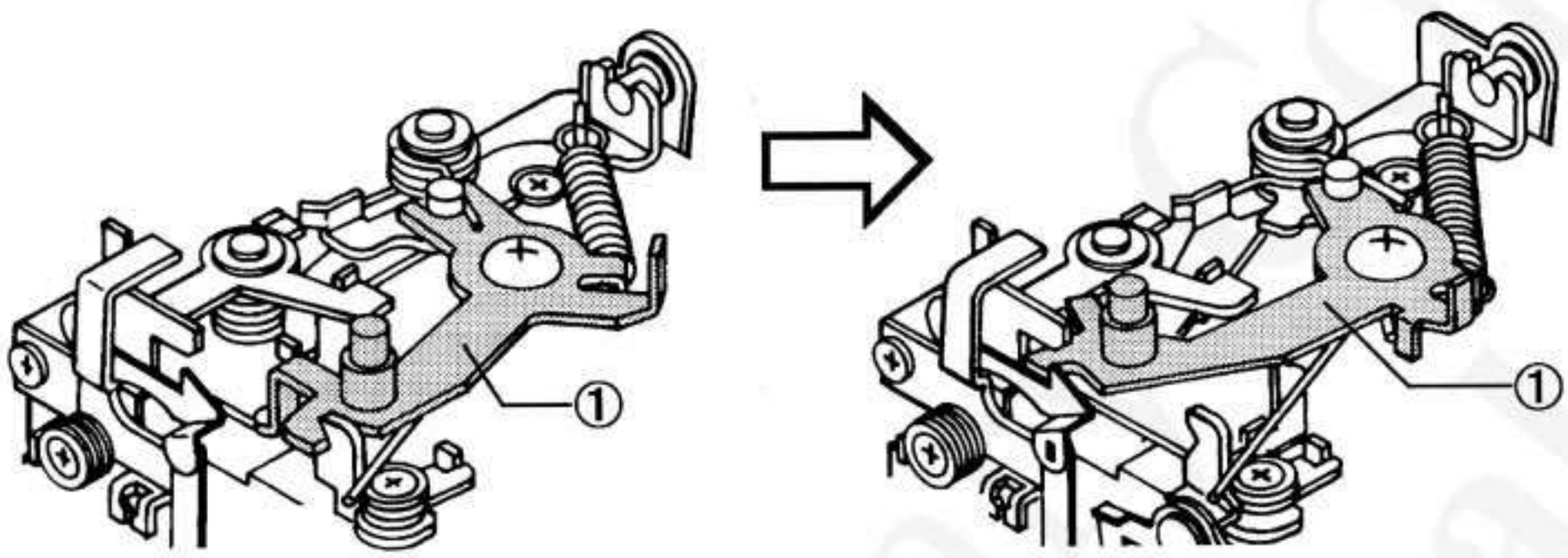
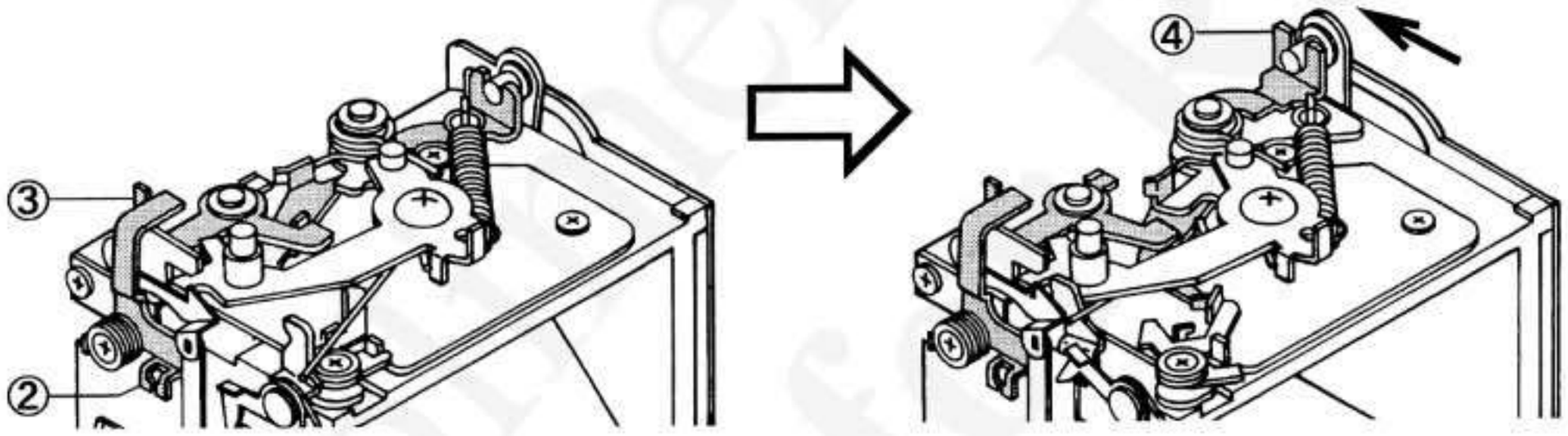
3. Diaphragm, mirror and shutter operations

[Description of mechanism]

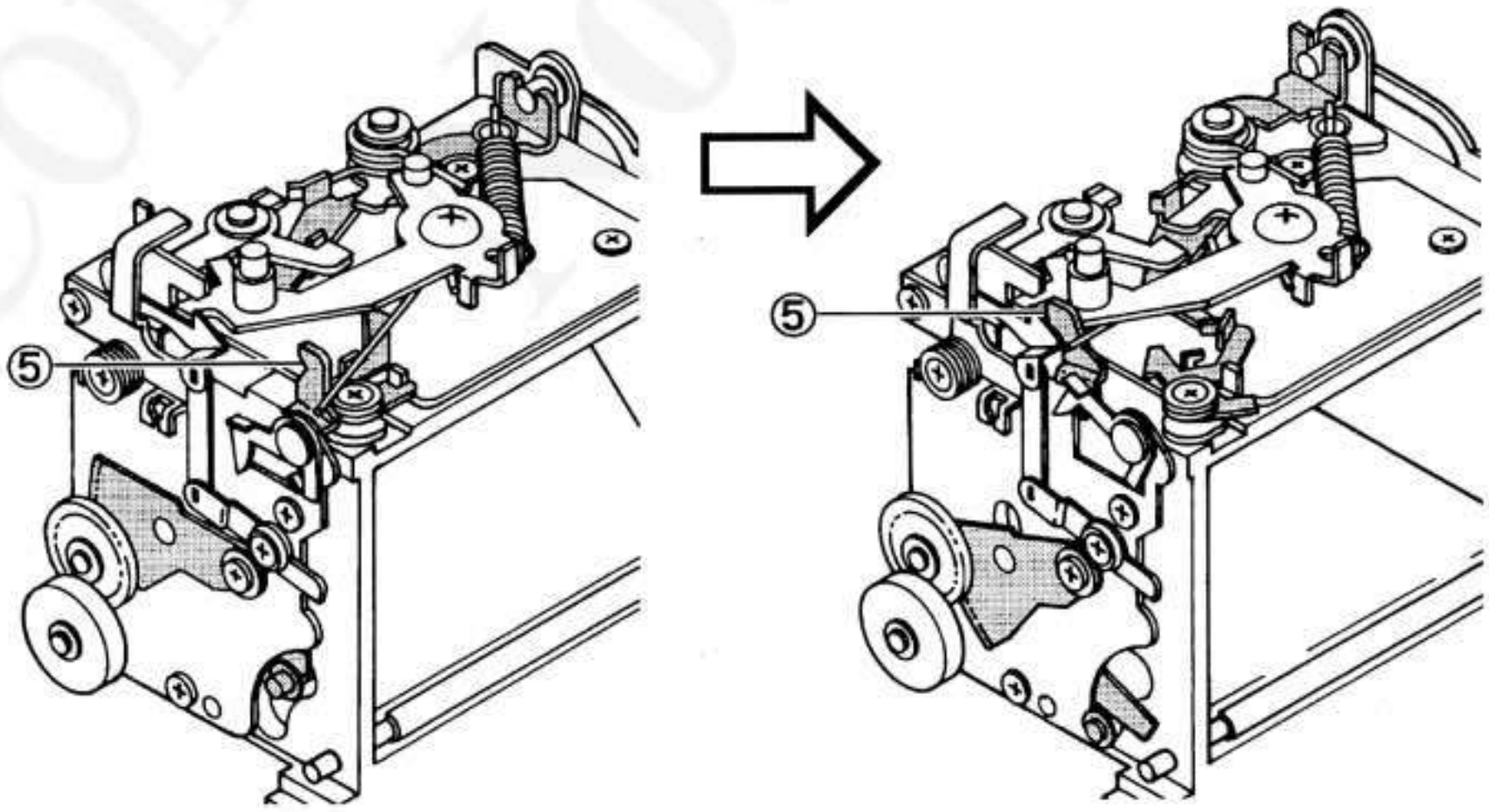
1) The operation of the winding lever allows the charge lever to move the charge pin ① through the set lever, and then the diaphragm and mirror are charged.



2) The release plate pulls down the ratchet lever ② with the release operation, and which releases the diaphragm plate ③ to operate the D lever ④ and activates the diaphragm of the lens.



3) The operation of the diaphragm plate releases the mirror operation lever ⑤, and then the mirror starts operating.



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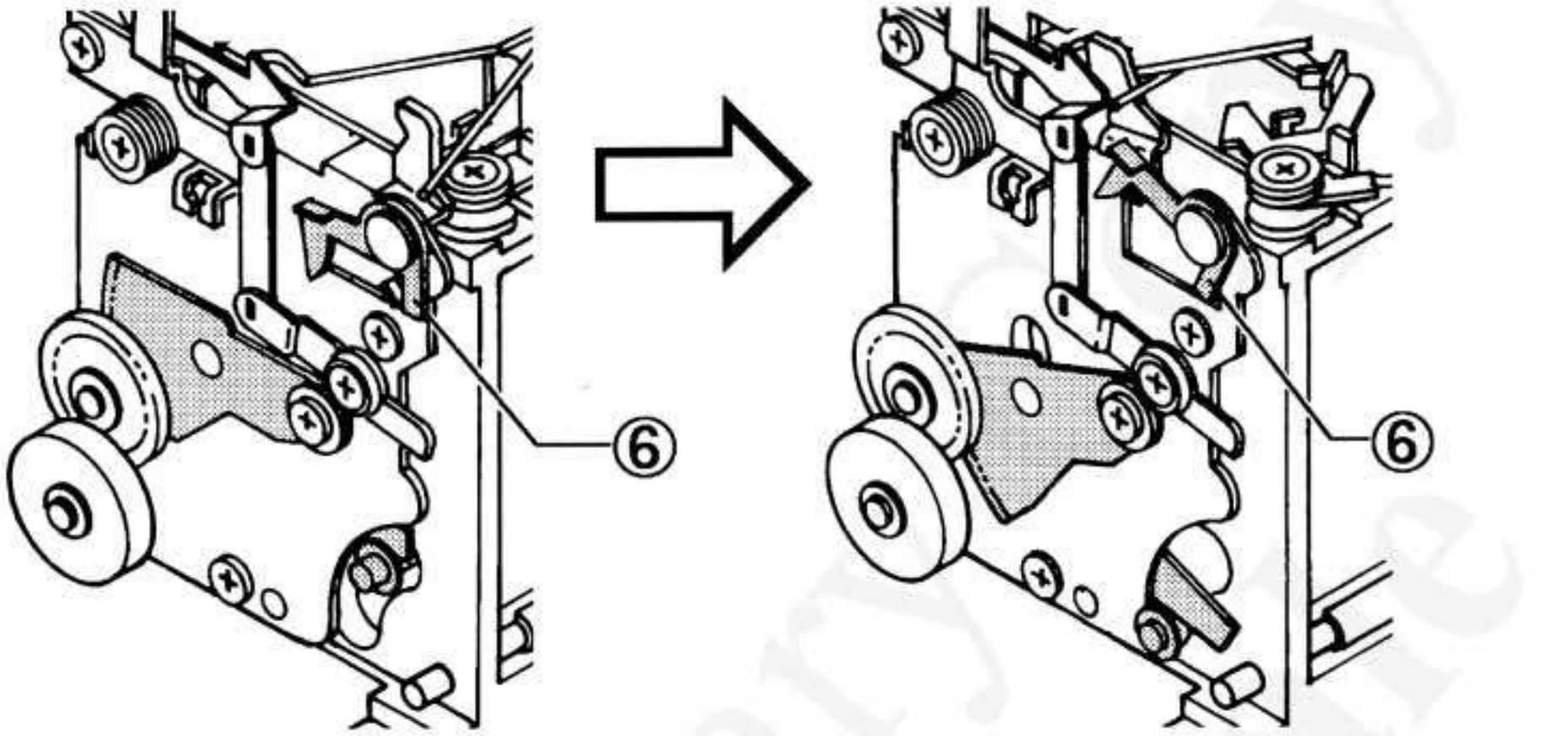
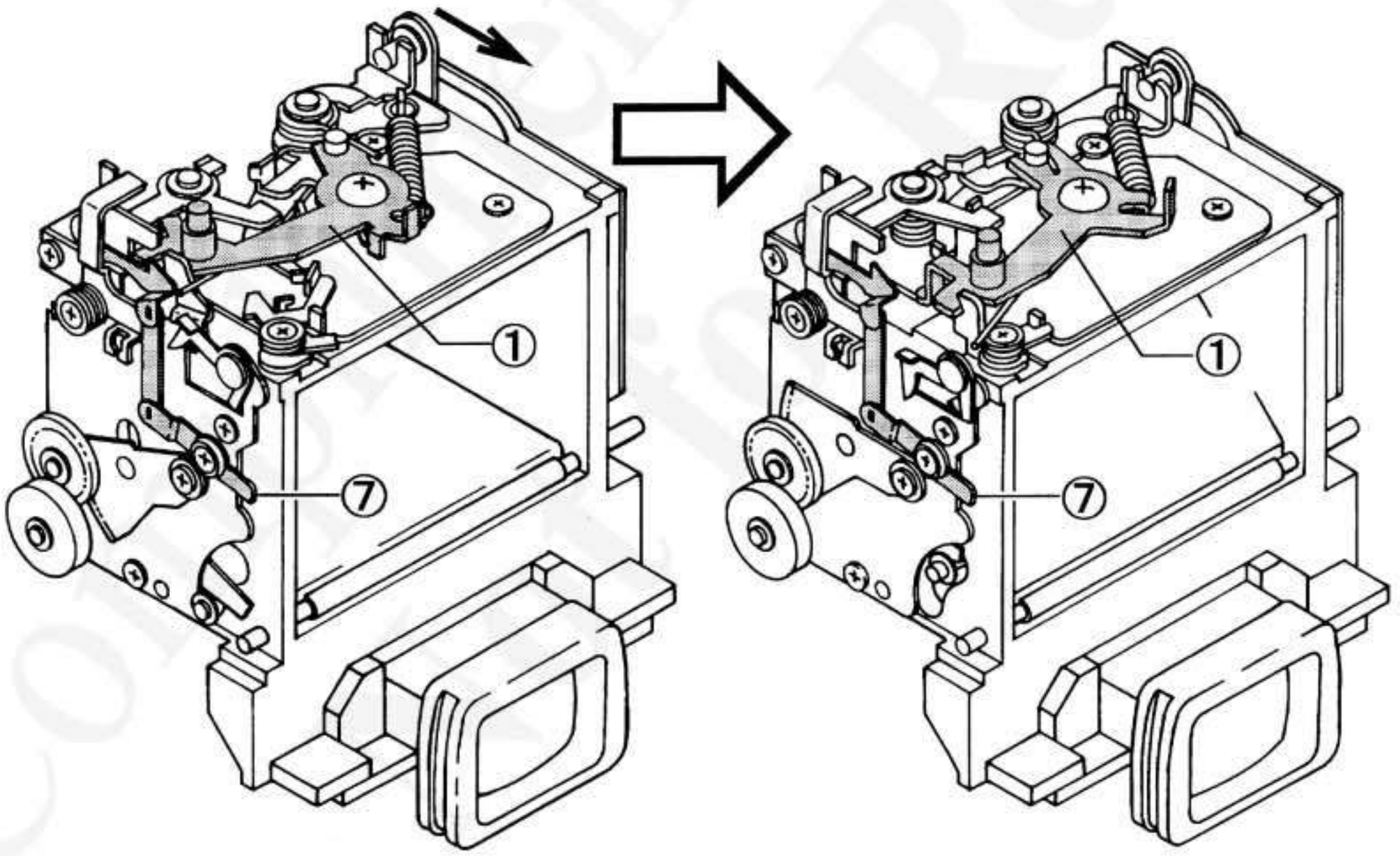
4) The mirror goes up and the shutter ratchet lever ⑥ starts operating and activates the shutter.



5) After the exposure ends and the 2nd curtain finishes closing, the charge ratchet lever ⑦ releases the charge pin ① and returns the mirror and diaphragm.



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I. OTHERS

[1] CIRCUIT DIAGRAM..... I-1

[2] WIRING DIAGRAM..... I-2

[3] MOUNTING DIAGRAM..... I-3

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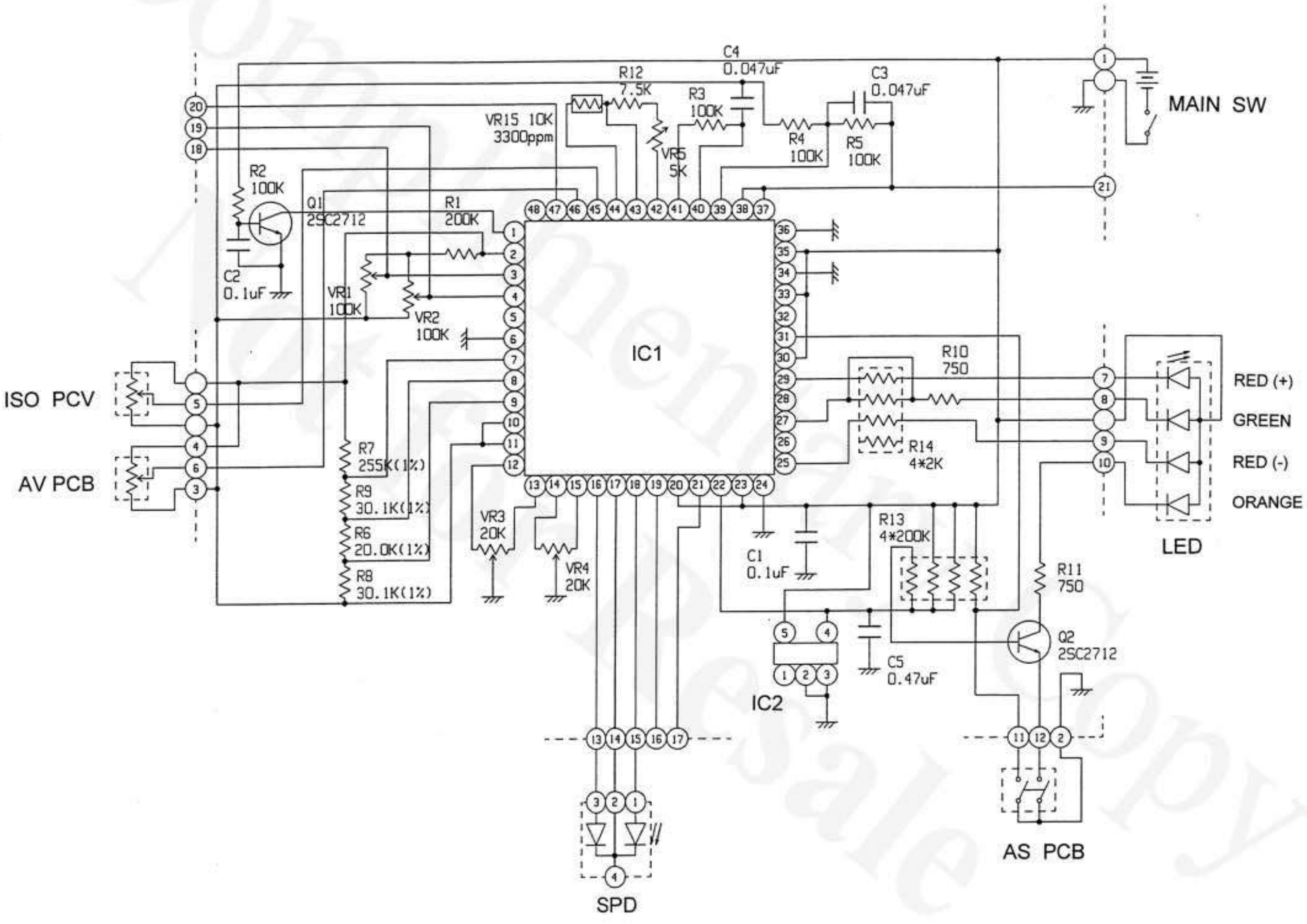
MDK CIRCUIT DIAGRAM



M FPC

1	Vcc
2	GND
3	Vs
4	Vr
5	S IN
6	F IN
7	Ro
8	G
9	Ru
10	SP
11	A/S 1
12	A/S 2
13	SP -IN
14	+IN
15	AV +IN
16	SP MON
17	AV MON
18	EE AV
19	EE SP
20	A4 MON
21	CP IN

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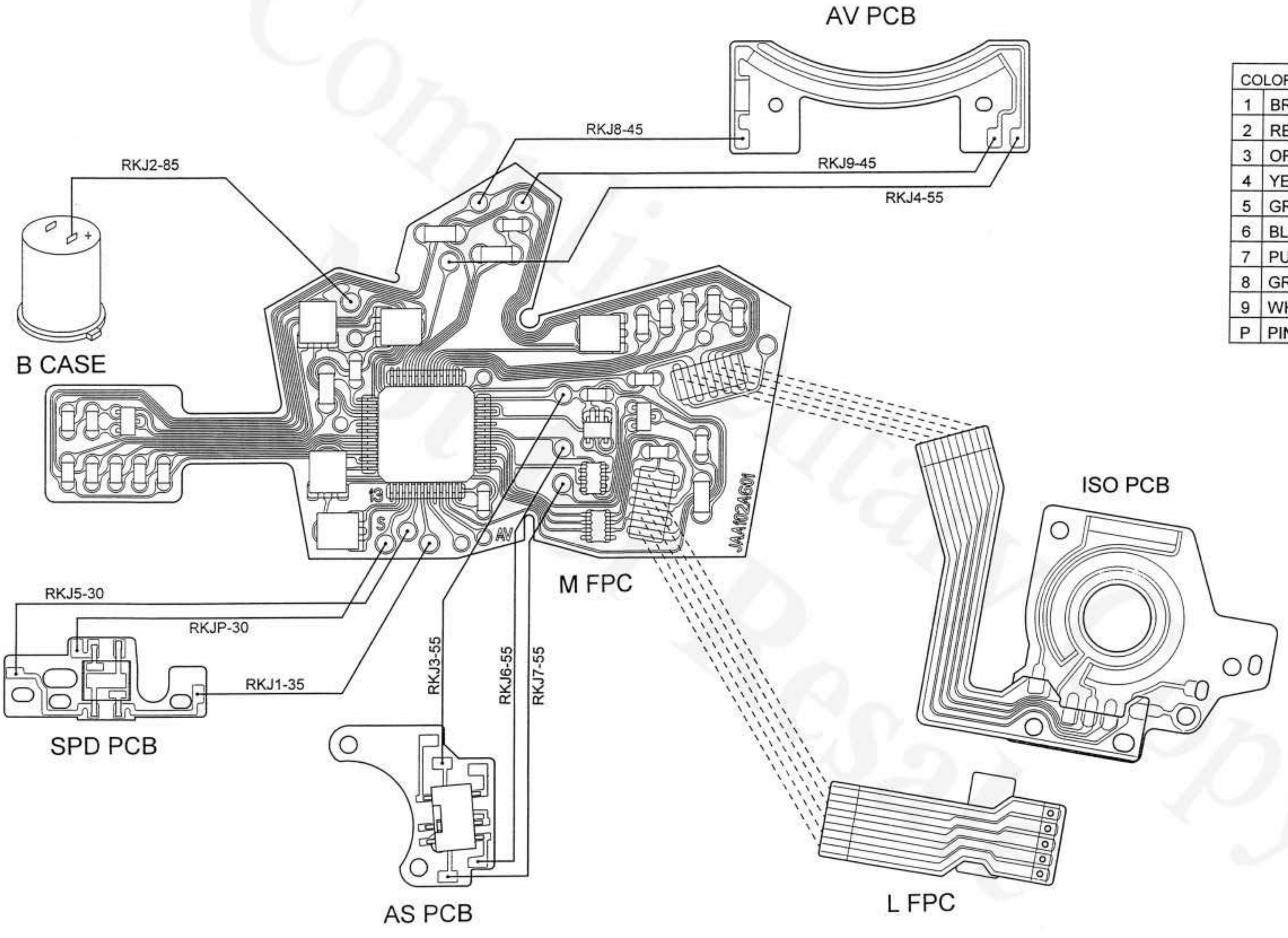
MDK WIRING DIAGRAM



COLOR CODE	
1	BROWN
2	RED
3	ORANGE
4	YELLOW
5	GREEN
6	BLUE
7	PURPLE
8	GRAY
9	WHITE
P	PINK

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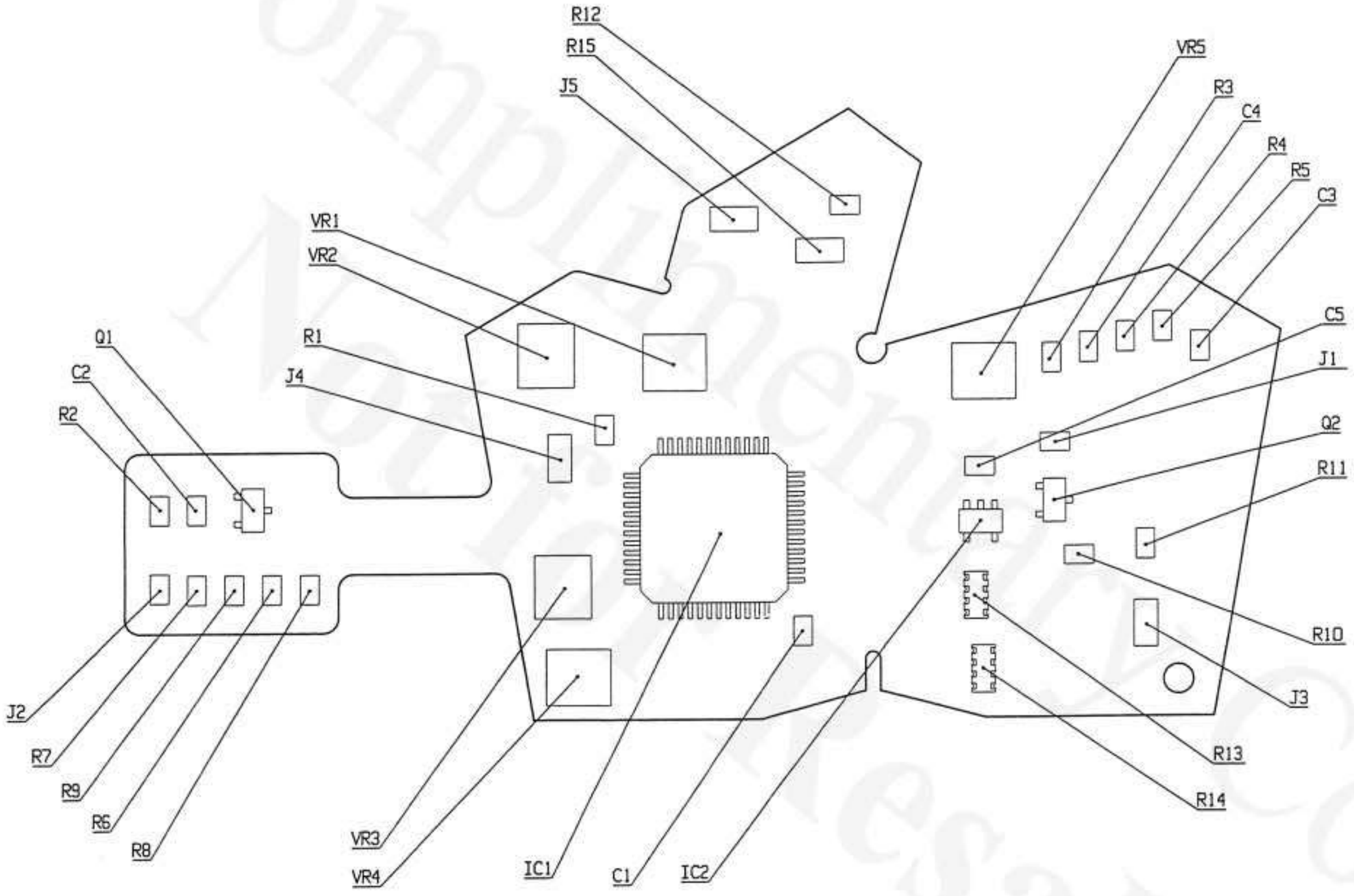
MDK MOUNTING DIAGRAM



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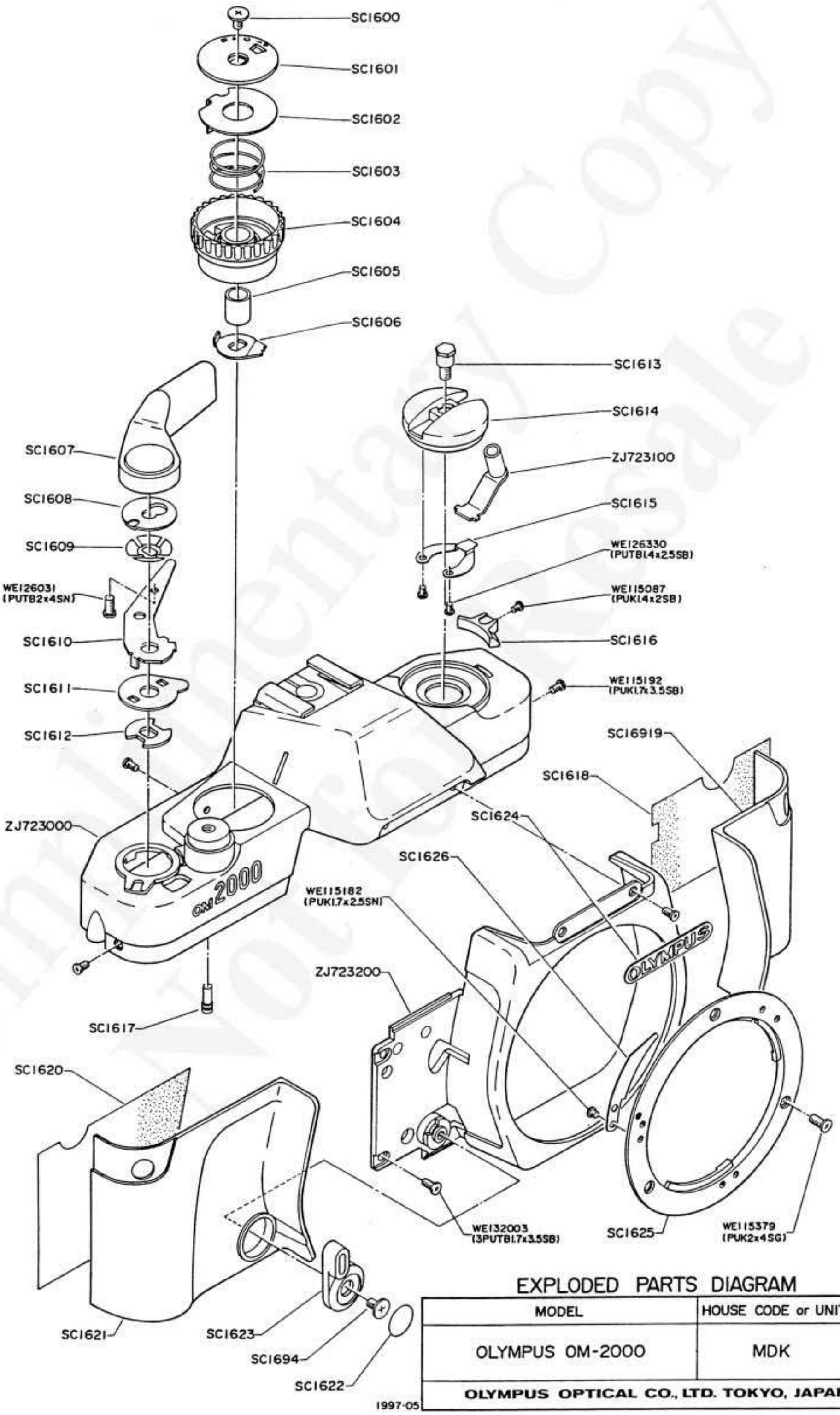
A B C D

1

2

3

4



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OLYMPUS OM-2000	MDK	1/5
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

1997-05

http://olympus.dementia.org/Hardware

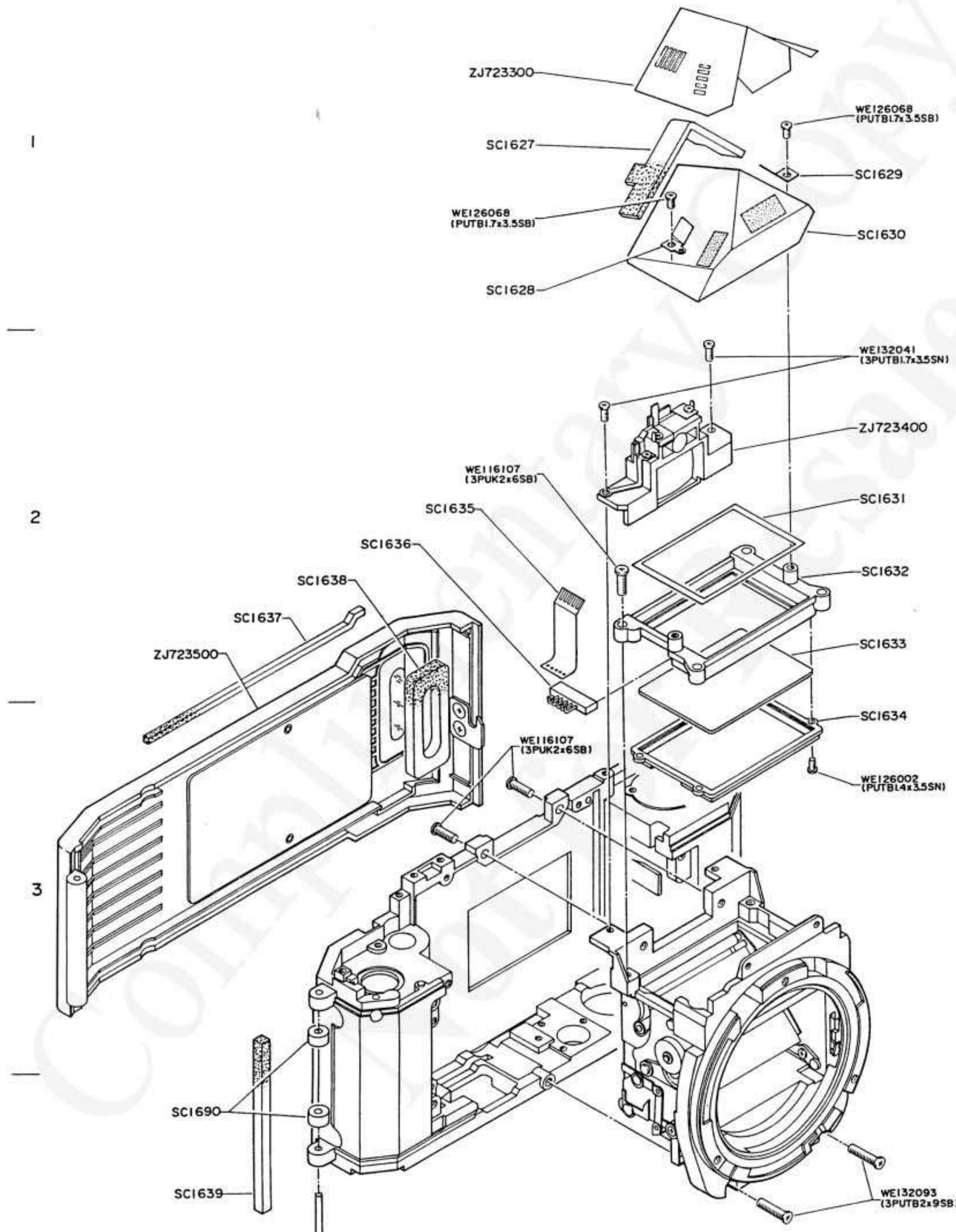
A B C D

1

2

3

4



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OLYMPUS OM-2000	MDK	2/5
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

1997-05

http://olympus.dementia.org/Hardware

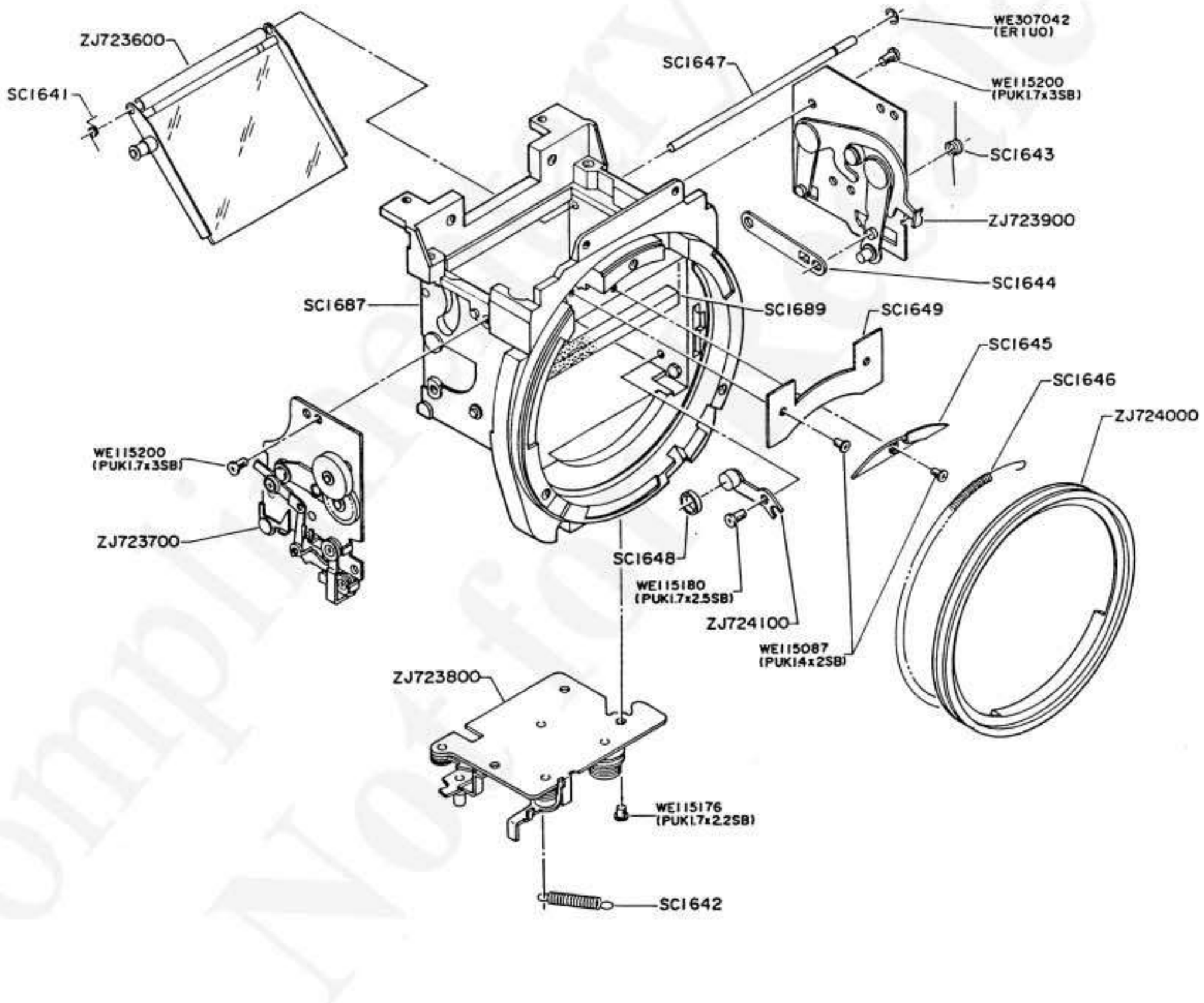
A | B | C | D

1

2

3

4



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OLYMPUS OM-2000	MDK	3/5
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

1997·05

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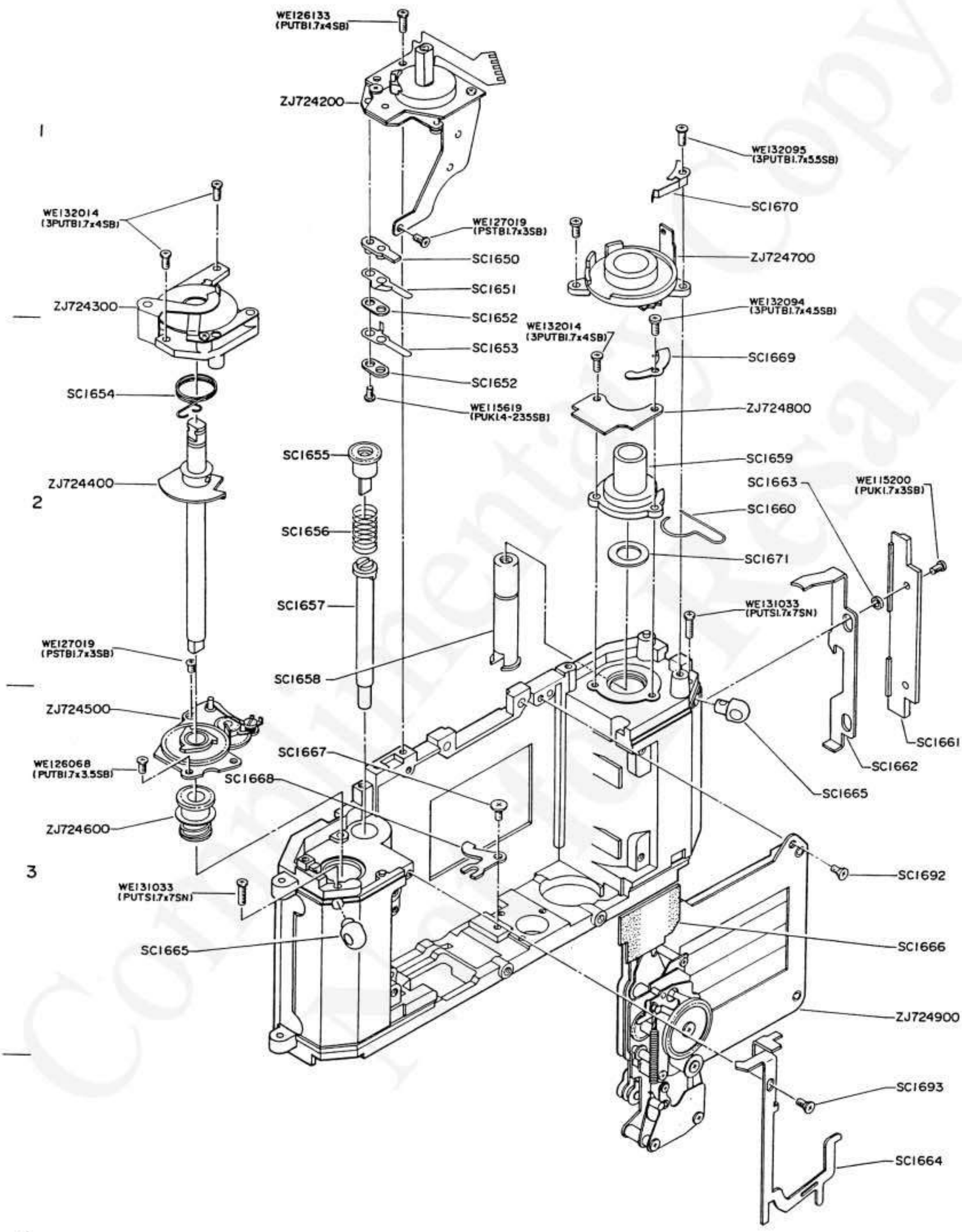
A B C D

1

2

3

4



EXPLODED PARTS DIAGRAM

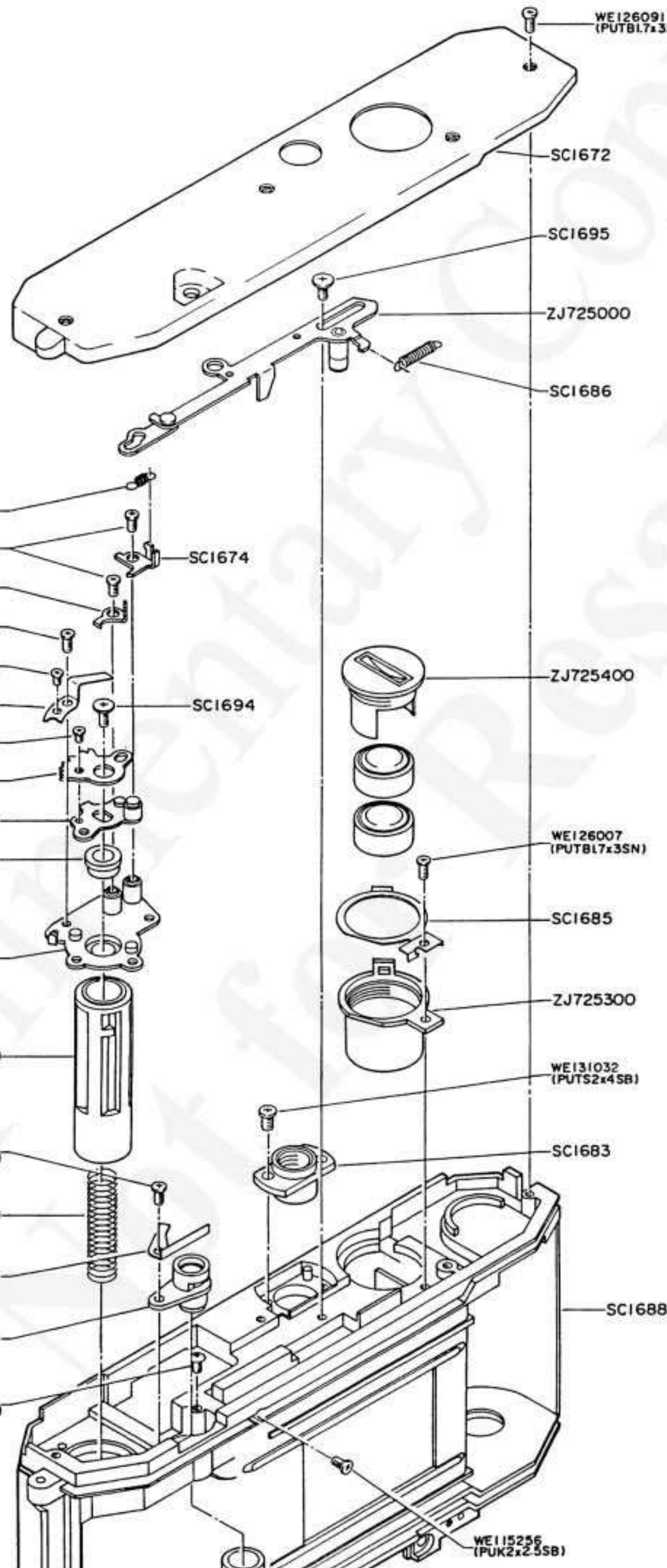
MODEL	HOUSE CODE or UNIT	FIG.
OLYMPUS OM-2000	MDK	4/5
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

1997·05

http://olympus.dementia.org/Hardware

A B C D

1 2 3 4



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OLYMPUS OM-2000	MDK	5/5
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

1997-05

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PARTS LIST

PARTS No.	NAME OF PARTS	NOTE
· SC1600	SD screw	1-B1
· SC1601	SD plate	1-B1
· SC1602	ISO plate	1-B1
· SC1603	ISO spring	1-B1
· SC1604	SD dial	1-B1
· SC1605	ISO collar	1-B1
· SC1606	ISO stopper	1-B1
· SC1607	AL cover	1-A2
· SC1608	AL washer	1-A2
· SC1609	AL spring	1-A2
· SC1610	A lever	1-A2
· SC1611	RL plate	1-A2
· SC1612	AL cam	1-A3
· SC1613	R screw	1-C2
· SC1614	R knob	1-C2
· SC1615	R spring	1-C2
· SC1616	AS lever	1-C2
· SC1617	Release pin	1-A3
· SC1618	Grip tape L	1-C3
· SC1619	Grip L	1-C3
· SC1620	Grip tape R	1-A3
· SC1621	Grip R	1-A4
· SC1622	ST cover	1-B4
· SC1623	ST lever	1-B4
· SC1624	Name plate	1-C3
· SC1625	B mount	1-C4
· SC1626	Mount spring	1-B3
· SC1627	F sponge	2-B1
· SC1628	P holder R	2-B1
· SC1629	P holder L	2-D1
· SC1630	Prism	2-D1
· SC1631	F mask	2-D2
· SC1632	P base	2-D2
· SC1633	Focusing screen	2-D2
· SC1634	S holder	2-D3
· SC1635	L FPC	2-B2
· SC1636	LED	2-B2
· SC1637	R sponge	2-A2
· SC1638	P sponge	2-B2
· SC1639	Side sponge	2-A4
· SC1640	Shaft	2-A4
· SC1641	M spring	3-A2
· SC1642	SL spring	3-C3
· SC1643	Link spring	3-D2
· SC1644	Link plate	3-D2
· SC1645	L cover	3-D2
· SC1646	C spring	3-D2
· SC1647	M shaft	3-C2
· SC1648	M rubber	3-C3
· SC1649	AV PCB	3-C2
· SC1650	SW base	4-B1
· SC1651	SW contact A	4-B1
· SC1652	Insulate plate	4-B1/4-B2
· SC1653	SW contact B	4-B2
· SC1654	FW spring	4-A2
· SC1655	ST gear	4-B2
· SC1656	ST spring	4-B2
· SC1657	ST shaft	4-B2
· SC1658	R shaft	4-B2
· SC1659	R shaft holder	4-C2
· SC1660	R shaft spring	4-C2
· SC1661	Key cover	4-D3
· SC1662	Key plate	4-D3
· SC1663	R collar	4-C2
· SC1664	Release plate	4-D4
· SC1665	Strap eyelet	4-A3/4-D3
· SC1666	S sponge	4-D3
· SC1667	Set screw	4-B3
· SC1668	Set lever	4-A3
· SC1669	Key spring	4-C2
· SC1670	AS spring	4-C1
· SC1671	R collar	4-C2
· SC1672	Bottom plate	5-C1
· SC1673	Ratchet spring	5-A2
· SC1674	Reset lever	5-B2
· SC1675	Ratchet lever	5-A2
· SC1676	RP spring	5-A2
· SC1677	Charge plate	5-A2
· SC1678	Shaft collar	5-A2
· SC1679	Spool	5-A3
· SC1680	Spool spring	5-A3
· SC1681	ST release	5-A3
· SC1682	ST shaft holder	5-A3
· SC1683	Tripod socket	5-C3
· SC1684	Sprocket	5-B4
· SC1685	B contact	5-C3
· SC1686	Charge spring	5-C1
· SC1687	Front casting	3-B2
· SC1688	Body casting	5-C3
· SC1689	M sponge	3-C2
· SC1690	Side collar	2-A4
· SC1692	S screw	4-D3

http://olympus-domestic.org/Hardware

PARTS LIST

PARTS No.	NAME OF PARTS	NOTE
・ SC1693	RL screw	4-D4
・ SC1694	ST screw	1-B4/5-B2
・ SC1695	C screw	5-C1
・ ZJ723000	Top cover	1-A3
・ ZJ723100	R lever	1-C2
・ ZJ723200	Front cover	1-B3
・ ZJ723300	M FPC	2-B1
・ ZJ723400	S frame	2-D2
・ ZJ723500	Rear cover	2-A2
・ ZJ723600	M frame	3-A2
・ ZJ723700	Side plate R	3-A3
・ ZJ723800	SL base	3-B3
・ ZJ723900	Side plate L	3-D2
・ ZJ724000	Coupling ring	3-D2
・ ZJ724100	M stopper	3-C3
・ ZJ724200	SD unit	4-B1
・ ZJ724300	Counter	4-A1
・ ZJ724400	Winding shaft	4-A2
・ ZJ724500	W base	4-A3
・ ZJ724600	Spool gear	4-A3
・ ZJ724700	AS base	4-C1
・ ZJ724800	AS PCB	4-C2
・ ZJ724900	Shutter	4-D3
・ ZJ725000	Charge lever	5-C1
・ ZJ725100	C plate	5-A2
・ ZJ725200	W shaft holder	5-A3
・ ZJ725300	B case	5-C3
・ ZJ725400	B cap	5-C2
WE116020	3PUK1.4X2SB	
WE116107	3PUK2X6SB	
WE132003	3PUTB1.7X3.5SB	
WE132041	3PUTB1.7X3.5SN	
・ WE132094	3PUTB1.7X4.5SB	
WE132014	3PUTB1.7X4SB	
・ WE132095	3PUTB1.7X5.5SB	
WE132039	3PUTB2X3SB	
・ WE132093	3PUTB2X9SB	
WE127019	PSTB1.7X3SB	
WE115572	PUK1.4-225SB	
・ WE115619	PUK1.4-235SB	
WE115087	PUK1.4X2SB	
WE115176	PUK1.7X2.2SB	
WE115180	PUK1.7X2.5SB	
WE115182	PUK1.7X2.5SN	
WE115188	PUK1.7X2SN	
WE115192	PUK1.7X3.5SB	
WE115200	PUK1.7X3SB	
WE115256	PUK2X2.5SB	
WE115379	PUK2X4SG	
WE126330	PUTB1.4X2.5SB	
WE126002	PUTB1.4X3.5SN	
WE126068	PUTB1.7X3.5SB	
WE126091	PUTB1.7X3SB	
WE126007	PUTB1.7X3SN	
WE126133	PUTB1.7X4SB	
WE126031	PUTB2X4SN	
・ WE131033	PUTS1.7X7SN	
・ WE131032	PUTS2X4SB	
WE307042	ER1UO	
RKJ-1	Lead wire (Brown)	20m
RKJ-2	Lead wire (Red)	20m
RKJ-3	Lead wire (Orange)	20m
RKJ-4	Lead wire (Yellow)	20m
RKJ-5	Lead wire (Green)	20m
RKJ-6	Lead wire (Blue)	20m
RKJ-7	Lead wire (Purple)	20m
RKJ-8	Lead wire (Gray)	20m
RKJ-9	Lead wire (White)	20m
RKJ-P	Lead wire (Pink)	20m

http://olympus.dementia.org/Hardware